



2015 Pack Expo Las Vegas

PackML Boosts Monitoring

Spencer Cramer, CEO of ei³ corporation

ei³ is an Industrial Internet of Things, “IIoT”, company

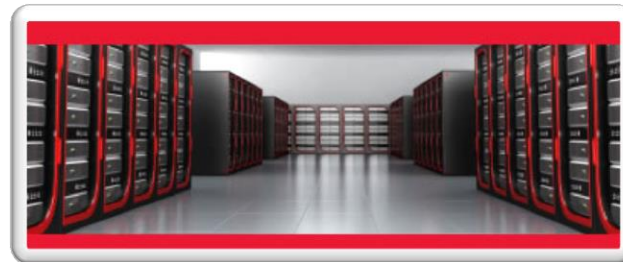
Provides hardware, software & hosting services

as a complete package. We take out the complexity of Industrial Internet services for customers to benefit from:

- Reduce Time to Market for Industrial Internet Programs
- Reduce Risk by building upon a 15 year success record
- Lower Cost by leveraging internet economies of scale
- Stay in front of competition by harnessing economy of scale



security devices



cloud infrastructure

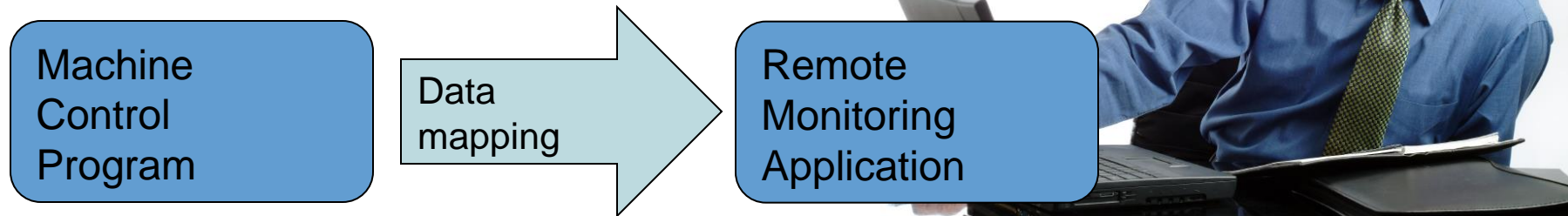


web and mobile apps

Standards Drive Efficiency

Our Internet Applications are template driven, not custom developments
Setting up machines requires data from heterogeneous equipment

- Too often we need to search through control programs for things like:
 - Machine speed
 - Fault codes
 - Status, other things
- Standard formats for data help this task

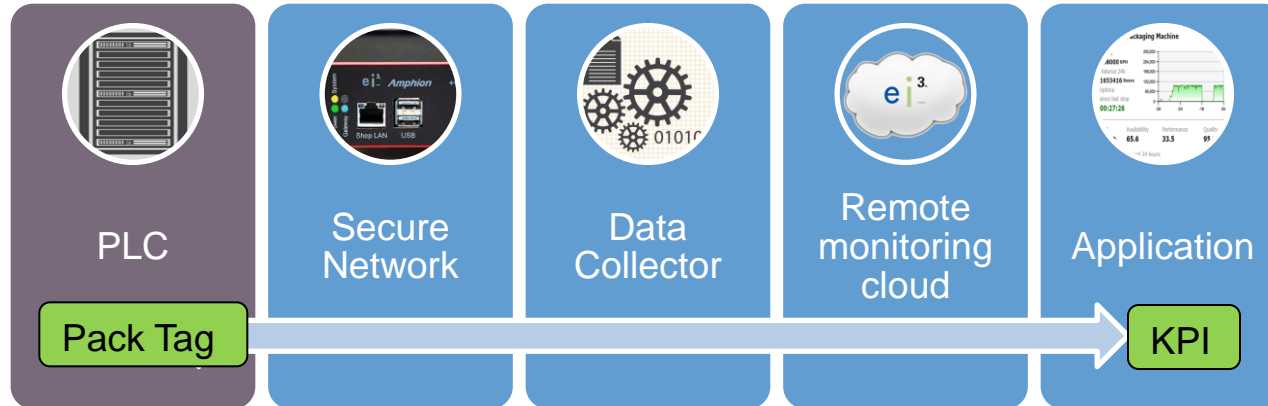


ei³

Streamlined Information Delivery

- PackTags have predefined “slots” in the ei³ platform
 - Templates accept PackTags
 - Rapid set up of machine KPIs, States, Codes


Packaging machine



Information Consumer



Native PackML Support



CUSTOMER PORTAL

Companies
Overview
Dashboard
Tools
Reports
Remote Monitoring
Downtime Tracking
My Profile
Help
Admin Tools
System Admin
Logout

Machines


Devices

Data Points

Users

User Groups

ProMach Users

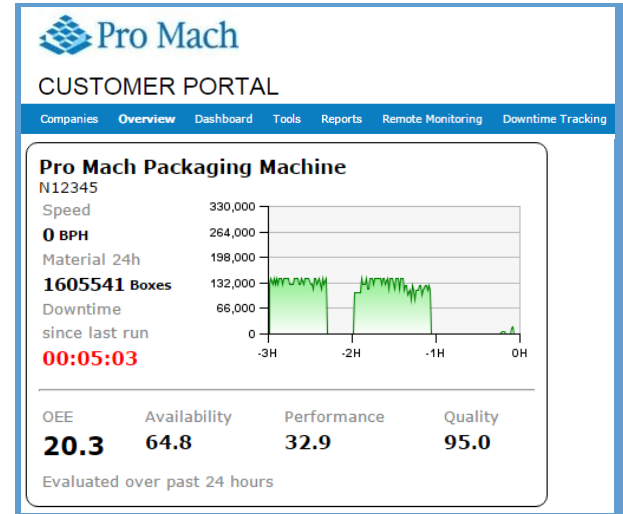
Data Points 

The following data points have been configured for the selected machine.

Action	Device	Tag Name	Description	Category	Read Address/Location/Tag	Units	Max Value	Min Value	Data Type	Scale Type	Tag Type	Charting	Statistics	Export	Alert
	PLC	AverageRate	Average Rate	Production	Application.PACKTAGS.Status.Parameter[3].Value	Units/Min	200.0	0.0	Float (4 bytes)	No scale	Process data (FB)	●	●	●	●
	PLC	DailyActual	Daily Production Status	Production	Application.PACKTAGS.Status.Parameter[2].Value	Units	1000000.0	0.0	Float (4 bytes)	No scale	Process data (FB)	●	●	●	●
	PLC	DailyTarget	Daily Production Target	Production	Application.PACKTAGS.Status.Parameter[1].Value	Units	1000000.0	0.0	Float (4 bytes)	No scale	Process data (FB)	●	●	●	●
	PLC	GoodMaterialDelta	Total Good Parts Delta	Count	Application.PACKTAGS.Admin.ProdProcessedCount[1].Count	parts	10000.0	0.0	Long integer (4 bytes)	Delta value (curr-prev)	Production material good count delta	●	●	●	●
	PLC	Linespeed	Current Machine Speed	Machine Status	Application.PACKTAGS.Status.CurMachSpeed	PPM	400.0	0.0	Float (4 bytes)	No scale	Machine speed (FB)	●	●	●	●
	PLC	ProdDefectiveCount1	Products Defective	Machine Status	Application.PACKTAGS.Admin.ProdDefectiveCount[1].Count	Products	2.147483647E9	0.0	Long integer (4 bytes)	No scale	Process data (FB)	●	●	●	●
	PLC	ProdProcessedCount1	Products Produced	Machine Status	Application.PACKTAGS.Admin.ProdProcessedCount[1].Count	Products	2.147483647E9	0.0	Long integer (4 bytes)	No scale	Process data (FB)	●	●	●	●

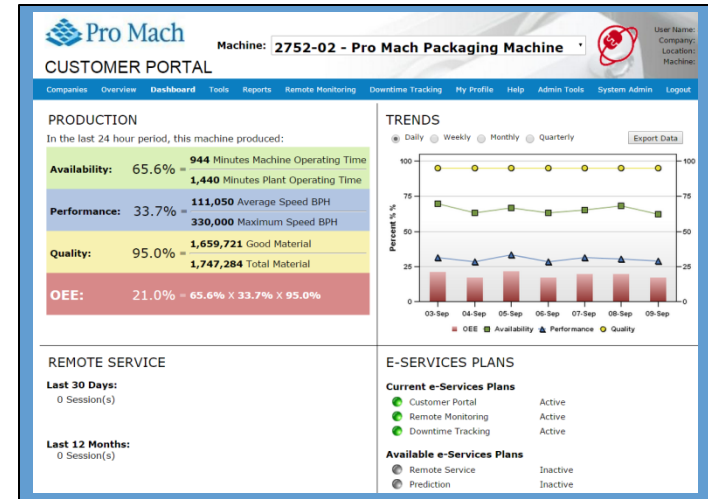
ei³ - Powerful Cloud Solution

- PackML data becomes information
 - Real time analytics upon arrival
 - KPIs are computed
 - Alerts are detected and dispatched
- Web pages, dashboards, reports
 - API based on REST
 - ei³ delivers information from machine to ERP
- Enabling plants to become proactive in their response



PackML Results

- Easier to bring machines online
 - Data integration is streamlined
 - Less time searching in programs
 - Packaging Machines online in Days
- Lower costs
 - Lower initial costs because integration is eliminated
 - Lower ongoing costs; Software as a Service



Conclusion

- PackML makes it easier for monitoring
 - Faster to connect
 - Easier to maintain
 - Better for end customers
- This standard is an essential element helping to drive the future of the Industrial Internet of Things
- Come and learn more
 - Tuesday at 12:00 – 1:00PM at the OMAC Booth
 - Pro Mach at booth 3423

