



Leveraging PI to Deliver Standardized Downtime Reports

**A Solution for Corporate Downtime
Reporting**

Agenda

- Introductions
- Business Challenge
- Solution Description
- Resulting Benefits
- Future Plans

VALUE NOW, VALUE OVER TIME



Introductions

- Jordan Richardson, Irving Group Moncton
 - Project Engineer, Electrical
 - Implemented the Downtime System at Irving Personal Care
 - Will over see the corporate roll-out for downtime and related KPI reporting

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Introductions



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Introductions

Forest Products

- **J. D. Irving, Limited**

Largest private reforestation program in Canada.

A full range of forest products:

- Lumber
- Pulp
- Paper
- Corrugated Medium



Consumer Products

- **Irving Tissue**

Leading manufacturer of premium quality tissue products – branded and private label.

- **Irving Personal Care**

New company – Private label diapers and training pants for North American retailers.



Petroleum Products

- **Irving Oil**

Largest and most environmentally advanced refinery in Canada – Capacity of 250,000 barrels per day.

- **Irving Lubricants**

Blender and packager of premium petroleum products.



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Introductions

Industrial Manufacturing

- **Shipbuilding**
- **Kent Homes**
Modular buildings – commercial & residential.
- **Strescon**
Pre-cast, pre-stressed concrete products.
- **Ocean Steel**
Fabricated steel structures.



Food Processing

- **Cavendish Farms**
4th largest processor of frozen potato products in North America.

Serving retail, food service and quick service restaurants.



Transportation Services

- **Midland Transport**
- **Sunbury Transport**
- **Kent Lines**
- **Atlantic Towing**
- **RST Industries**
- **NB Southern Railway**



Other Businesses

- Home improvement stores
- Construction and engineering services
- Truck parts & service
- Media
- Fertilizers & agricultural services



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Introductions



Moncton Group

Company	No. of Facilities	No. of Employees
Cavendish Farms	11	1,250
Irving Tissue	3	1,085
Irving Personal Care	1	106
Midland Group	38	1,928
Cavendish Agri	19	132
Protrans		525
Universal Properties		20
TOTAL	72	5,046

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Introductions

- Irving Personal Care
 - 150,000 sqft
 - State of the art facility
 - 750 diapers per minute
 - 3.5 million cases



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Business Challenge

- Diverse business units, interests vary but units have common goals
- Continuous improvement required a solution for corporate downtime reporting
- Critical to improving plant efficiency
- Corporate meant a common approach to both collecting data and calculating numbers, critical to buy-in on the plant floor

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Business Challenge

- Create a downtime system to be accepted across the organization.
- To be:
 - Simple, easy to use and understood
 - integrated with plant controls in real time
 - functionally transparent in plants with no control
 - integrated with corporate MSSQL databases for business applications and WEB based reporting

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Solution Description



- ADM was awarded a contract to implement a downtime system at the IPC plant.
- Based on PI and Duet™ technology.
- Unique to corporation and generic for business units, regardless of automation infrastructure

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Introductions

- Keith Flynn, P.Eng.
 - VP, Data Management, ADM Systems Engineering
 - Electrical & Computer Science background
 - Automation, process control & data
 - Led five projects for automatic delivery of real time OEE, downtime and related KPI reports

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Introductions

- ADM Systems Engineering Ltd.
 - Engineering and software development
 - OSIsoft Silver Partner
 - Developer of Duet™
 - Successfully completed downtime, uptime and event reporting projects

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Solution Description



- Functional Requirements

1. Automated, real-time downtime event tracking
2. Events accessible for operators to view & modify
3. Reporting
4. Security
5. Configuration toolset
6. Data transfer to external database

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Solution Description



- Duet Technology
 - 4th Generation
 - A suite of software working in concert with PI to deliver event based Key Performance Indicators (KPI's) and root cause.
 - A flexible system utilizing Microsoft technology
 - Leverages the power of PI RtAnalytics (PI, PI MDB, Event Framework and PI-ACE) to automatically deliver real time, client defined downtime or industry standard OEE reports

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Solution Description



- Duet Technology Features
 - Configuration wizards
 - Integrated with PI Batch, BatchView
 - Reporting that supports
 - Time weighted results, proportional to actual loss, accurate to your tag scan rate.
 - Relative time stamps for real time monitoring
 - Recalculation based on updated data
 - Results retroactive to the creation of your PI tags
 - Dynamic reporting intervals for hour, shift, week or month.

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Solution Description



- Prerequisite software
 - PI Enterprise Server
 - PI Batch
 - PI ACE
 - PI SDK
 - .Net ASP Server with IIS 5.0 or better

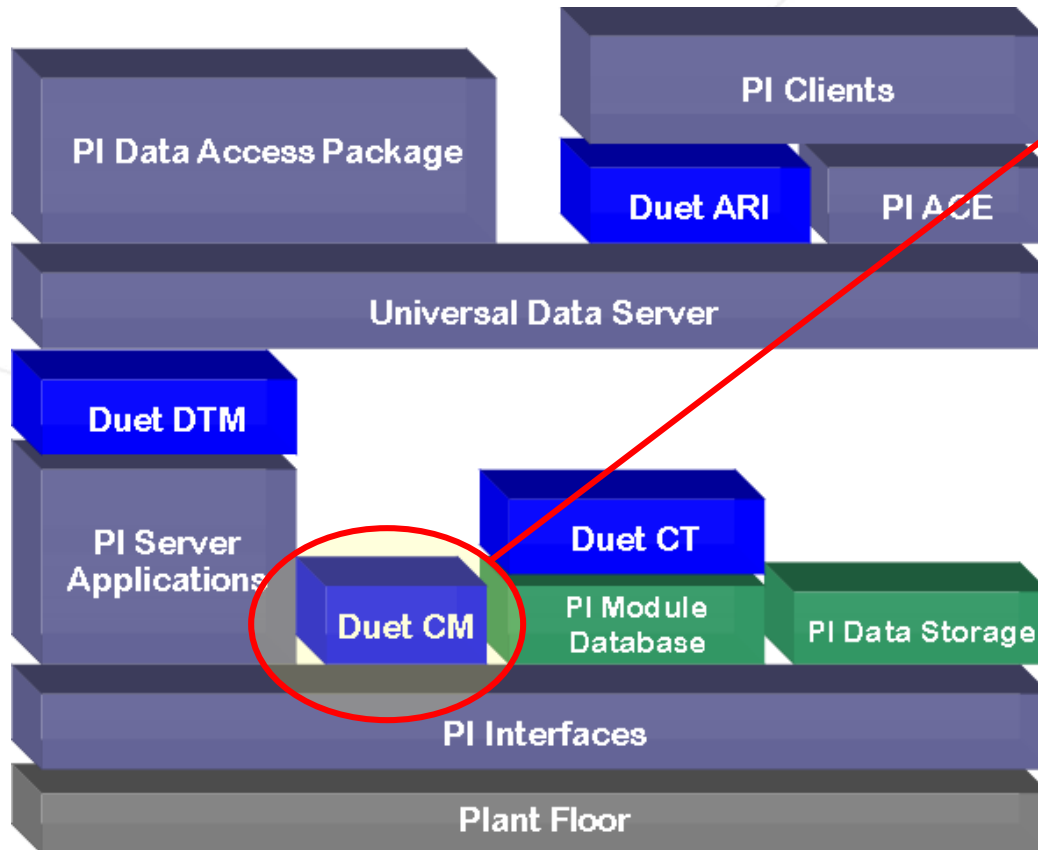
VALUE NOW, VALUE OVER TIME



Solution Description



Duet[™]
Downtime, Uptime & Event Tracking



- Core Module
 - Creates record
 - Bases on I/O in PI MBD
 - Calculates
 - KPI's
 - OEE
 - Downtime
 - Speed & Quality Loss

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Solution Description



Duet™
Downtime, Uptime & Event Tracking

PI-ACE Manager

Server Executable Module Context Tag Help

irvmonwnt313

- Daily_Calculation
- Differential
- DuetDataTransfer
- Equivalent_Standard_Cases
- Filtered_Delay
- First_Diapers_Actual
- First_Diapers_Previous
- First_Diapers_Target
- GenericDowntimeCalculationModule**
 - Inputs_25
 - Input Tags
 - Output Tags
 - Contexts
 - \\localhost\Downtime Modules\IPC\Moncton\Line A\JOA_A
 - \\localhost\Downtime Modules\IPC\Moncton\Line C\JOA_C
 - \\localhost\Downtime Modules\IPC\Moncton\Line B\JOA_B
- IPC_General_Data
- IPC_Production_Report_Calculations
- MillsPreviousShift
- MSSQL_To_PI
- MSSQL_UPDATE
- On_Target
- On_Target_Previous

Name	Status/Value	Since	Schedule	Output Tags
Current Status	On	4/26/2006 5:35:35 PM		
Context Summary				
GenericDowntimeCalculationM...	On	4/26/2006 5:35:15 PM	Natural (4)	1
GenericDowntimeCalculationM...	On	4/26/2006 5:35:25 PM	Natural (4)	1
GenericDowntimeCalculationM...	On	4/26/2006 5:35:35 PM	Natural (4)	1

1 Modules; 3 Contexts (3 Running, 0 Error, 0 Unregistered, 0 OutOfService)

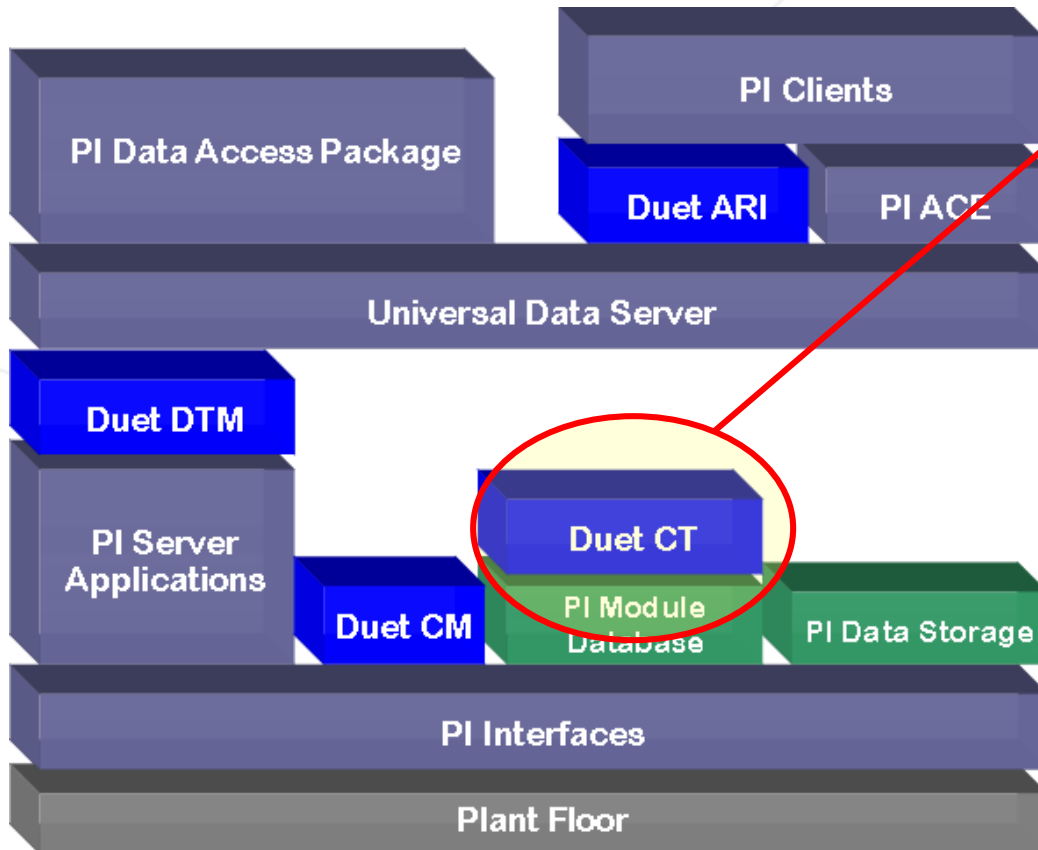
VALUE NOW, VALUE OVER TIME



Solution Description



Duet[™]
Downtime, Uptime & Event Tracking



- Configuration Toolset
 - GUI
 - Add or delete
 - Divisions
 - Plants
 - Production lines
 - Machine centers
 - Root causes
 - Security levels

VALUE NOW, VALUE OVER TIME



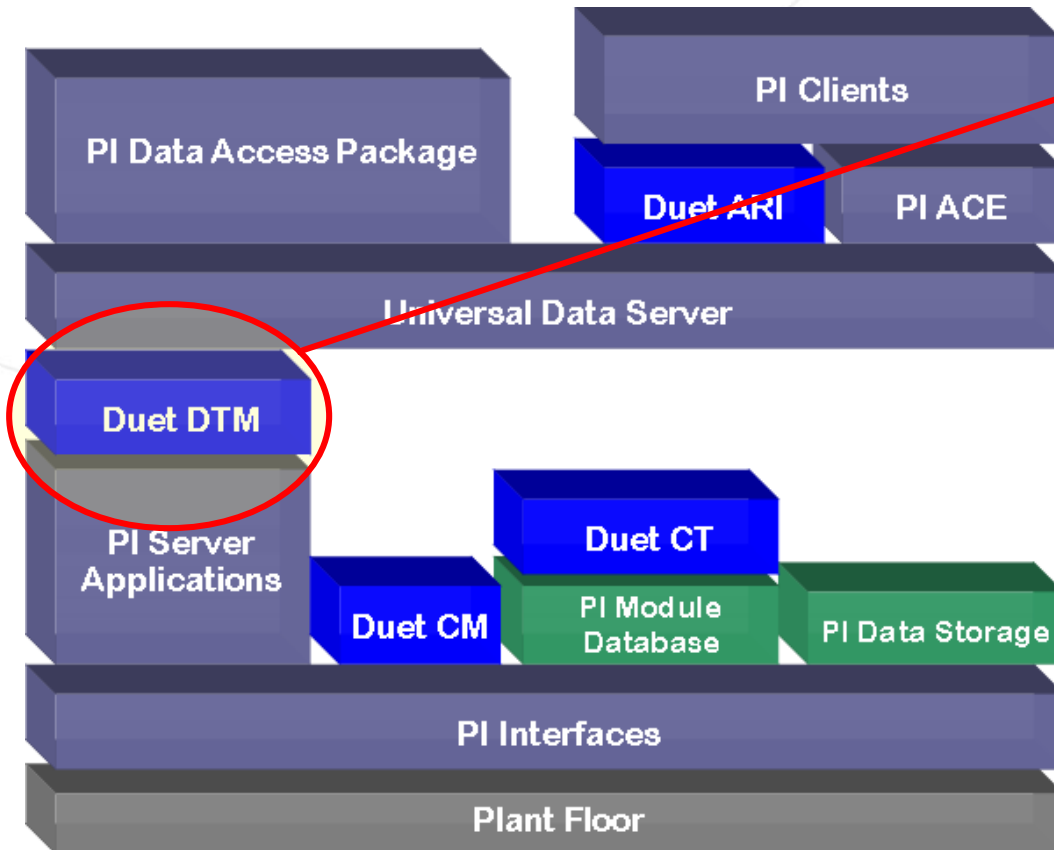
Duet™
Downtime, Uptime & Event Tracking



Solution Description



Duet[™]
Downtime, Uptime & Event Tracking



- **Data Transfer Module**
 - Moves Data From PI Batch Subsystem to MS SQL

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Solution Description



Duet™
Downtime, Uptime & Event Tracking

SQL Server Enterprise Manager - [Data in Table 'IPC_Downtime_Reporting_Interval' in 'IPCD' on 'JDISTJWNT890']

File Window Help

Trans START_TIME END_TIME UNIT1 UNIT2 UNIT3 BATC PRI_SEC DURATION DURATION_W DURATION_D DURATION_M DURATION_S DIVISION SITE AREA MACHINE MACHINE_CEN SUB_EQUIPMENT PROBLEM CAUSE FRY ROOT_CATH

6498 5/2/2006 12:00:00 PM 5/2/2006 1:00:00 PM 5/2/2 <NUI <NULL> Primary <NULL> <NULL> <NU <NULL> <NULL> <NULL> <NULL> IPC Moncton Line B JOA_B JOA_B 000 - Whole JOA Mac Cleaning Other or Unl N/A Operational

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6495 5/2/2006 12:00:00 PM 5/2/2006 1:00:00 PM 5/2/2 <NUI <NULL> Primary <NULL> <NULL> <NU <NULL> <NULL> <NULL> <NULL> IPC Moncton Line B JOA_B JOA_B 000 - Whole JOA Mac Cleaning Other or Unl N/A Operational

6494 5/2/2006 11:00:00 AM 5/2/2006 12:00:00 PM 5/2/2 5/2: 2.77 Primary 2.77 2.77 0 2.77 0 IPC Moncton Line B JOA_B JOA_B 300 - BE & FIE Dies OP Side FE Chip Low Pressur N/A Operational

6493 4/29/2006 12:00:00 PM 4/29/2006 1:00:00 PM <NULL <NUI <NULL> <NULL> <NULL> <NU <NULL> <NULL> <NULL> <NULL> IPC Moncton Line C JOA_C JOA_C N/A N/A N/A N/A

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6491 5/2/2006 11:00:00 AM 5/2/2006 12:00:00 PM 5/2/2 <NUI <NULL> Primary <NULL> <NULL> <NU <NULL> <NULL> <NULL> <NULL> IPC Moncton Line C JOA_C JOA_C N/A N/A N/A N/A

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6488 5/2/2006 11:00:00 AM 5/2/2006 12:00:00 PM 5/2/2 5/2: 14.22 Primary 14.22 14.22 0 14.22 0 IPC Moncton Line C JOA_C JOA_C N/A N/A N/A N/A

6487 5/2/2006 10:00:00 AM 5/2/2006 11:00:00 AM 5/2/2 5/2: 17.37 Primary 17.37 17.37 0 17.37 0 IPC Moncton Line C JOA_C JOA_C N/A N/A N/A N/A

6486 4/29/2006 12:00:00 PM 4/29/2006 1:00:00 PM <NULL <NUI <NULL> <NULL> <NULL> <NU <NULL> <NULL> <NULL> <NULL> IPC Moncton Line C JOA_C JOA_C N/A N/A N/A N/A

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6484 5/2/2006 10:00:00 AM 5/2/2006 11:00:00 AM 5/2/2 <NUI <NULL> Primary <NULL> <NULL> <NU <NULL> <NULL> <NULL> <NULL> IPC Moncton Line C JOA_C JOA_C N/A N/A N/A N/A

6483 5/1/2006 11:00:00 PM 5/2/2006 <NULL <NUI <NULL> <NULL> <NULL> <NU <NULL> <NULL> <NULL> <NULL> IPC Moncton Line C JOA_C JOA_C N/A N/A N/A N/A

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6481 5/2/2006 10:00:00 AM 5/2/2006 11:00:00 AM 5/2/2 5/2: 3.52 Primary 3.52 3.52 3.52 0 3.52 0 IPC Moncton Line C JOA_C JOA_C N/A N/A N/A N/A

6480 5/2/2006 10:00:00 AM 5/2/2006 11:00:00 AM 5/2/2 5/2: 7.92 Primary 1.08 1.08 1.08 0 1.08 0 IPC Moncton Line C JOA_C JOA_C N/A N/A N/A N/A

6479 5/2/2006 9:00:00 AM 5/2/2006 10:00:00 AM 5/2/2 5/2: 7.92 Primary 6.83 6.83 6.83 0 6.83 0 IPC Moncton Line C JOA_C JOA_C N/A N/A N/A N/A

6478 4/29/2006 12:00:00 PM 4/29/2006 1:00:00 PM <NULL <NUI <NULL> <NULL> <NULL> <NU <NULL> <NULL> <NULL> <NULL> IPC Moncton Line C JOA_C JOA_C N/A N/A N/A N/A

6477 5/2/2006 10:00:00 AM 5/2/2006 11:00:00 AM 4/30/ <NUI <NULL> Primary <NULL> <NULL> <NU <NULL> <NULL> <NULL> <NULL> IPC Moncton Line C JOA_C JOA_C N/A N/A N/A N/A

6476 5/2/2006 9:00:00 AM 5/2/2006 10:00:00 AM 5/2/2 <NUI <NULL> Primary <NULL> <NULL> <NU <NULL> <NULL> <NULL> <NULL> IPC Moncton Line C JOA_C JOA_C N/A N/A N/A N/A

6475 5/2/2006 8:00:00 AM 5/2/2006 9:00:00 AM 5/2/2 <NUI <NULL> Primary <NULL> <NULL> <NU <NULL> <NULL> <NULL> <NULL> IPC Moncton Line C JOA_C JOA_C N/A N/A N/A N/A

6474 5/1/2006 11:00:00 PM 5/2/2006 <NULL <NUI <NULL> <NULL> <NULL> <NU <NULL> <NULL> <NULL> <NULL> IPC Moncton Line C JOA_C JOA_C N/A N/A N/A N/A

6473 4/29/2006 9:00:00 PM 4/29/2006 10:00:00 PM <NULL <NUI <NULL> <NULL> <NULL> <NU <NULL> <NULL> <NULL> <NULL> IPC Moncton Line C JOA_C JOA_C N/A N/A N/A N/A

6472 5/2/2006 9:00:00 AM 5/2/2006 10:00:00 AM 5/2/2 5/2: 7.42 Primary 7.42 7.42 7.42 0 7.42 0 IPC Moncton Line C JOA_C JOA_C N/A N/A N/A N/A

6471 5/2/2006 9:00:00 AM 5/2/2006 10:00:00 AM 5/2/2 5/2: 6.85 Primary 6.85 6.85 6.85 0 6.85 0 IPC Moncton Line C JOA_C JOA_C N/A N/A N/A N/A

6470 5/2/2006 9:00:00 AM 5/2/2006 10:00:00 AM 5/2/2 5/2: 64.85 Primary 0.32 0.32 0 0.32 0 IPC Moncton Line C JOA_C JOA_C N/A N/A N/A N/A

6469 4/29/2006 12:00:00 PM 4/29/2006 1:00:00 PM <NULL <NUI <NULL> <NULL> <NULL> <NU <NULL> <NULL> <NULL> <NULL> IPC Moncton Line C JOA_C JOA_C N/A N/A N/A N/A

6468 4/29/2006 <NULL <NUI <NULL> <NULL> <NULL> <NU <NULL> <NULL> <NULL> <NULL> IPC Moncton Line C JOA_C JOA_C N/A N/A N/A N/A

6467 5/2/2006 9:00:00 AM 5/2/2006 10:00:00 AM 4/30/ <NUI <NULL> Primary <NULL> <NULL> <NU <NULL> <NULL> <NULL> <NULL> IPC Moncton Line C JOA_C JOA_C N/A N/A N/A N/A

6466 5/2/2006 8:00:00 AM 5/2/2006 9:00:00 AM 5/2/2 5/2: 7.95 Primary 7.95 7.95 7.95 0 7.95 0 IPC Moncton Line A JOA_A JOA_A 350 - Hook Splicer Web Break Other or Unl electrician Maint. Electr

6465 5/2/2006 8:00:00 AM 5/2/2006 9:00:00 AM 5/2/2 5/2: 4.45 Primary 4.45 4.45 0 4.45 0 IPC Moncton Line A JOA_A JOA_A 675 - Cuff Elastics Un Stopped to char Roll Empty N/A Operational

6464 5/2/2006 7:00:00 AM 5/2/2006 8:00:00 AM 5/2/2 5/2: 3.7 Primary 3.7 3.7 0 3.7 0 IPC Moncton Line A JOA_A JOA_A N/A N/A N/A N/A

6463 5/1/2006 11:00:00 PM 5/2/2006 <NULL <NUI <NULL> <NULL> <NULL> <NU <NULL> <NULL> <NULL> <NULL> IPC Moncton Line A JOA_A JOA_A N/A N/A N/A N/A

6462 4/29/2006 9:00:00 PM 4/29/2006 10:00:00 PM <NULL <NUI <NULL> <NULL> <NULL> <NU <NULL> <NULL> <NULL> <NULL> IPC Moncton Line A JOA_A JOA_A N/A N/A N/A N/A

6461 5/2/2006 8:00:00 AM 5/2/2006 9:00:00 AM 5/2/2 5/2: 64.85 Primary 60 60 0 60 0 IPC Moncton Line B JOA_B JOA_B 100 - Mill Duct Build Up Other or Unl scarf return Operational

6460 5/2/2006 7:00:00 AM 5/2/2006 8:00:00 AM 5/2/2 5/2: 64.85 Primary 4.53 4.53 0 4.53 0 IPC Moncton Line B JOA_B JOA_B 100 - Mill Duct Build Up Other or Unl scarf return Operational

6459 5/2/2006 7:00:00 AM 5/2/2006 8:00:00 AM 5/2/2 5/2: 12.75 Primary 12.75 12.75 0 12.75 0 IPC Moncton Line B JOA_B JOA_B 250 - Upper Tissue Gt Web Break Other or Unl N/A N/A

6458 4/29/2006 12:00:00 PM 4/29/2006 1:00:00 PM <NULL <NUI <NULL> <NULL> <NULL> <NU <NULL> <NULL> <NULL> <NULL> IPC Moncton Line B JOA_B JOA_B N/A N/A N/A N/A

6457 4/29/2006 <NULL <NUI <NULL> <NULL> <NULL> <NU <NULL> <NULL> <NULL> <NULL> IPC Moncton Line B JOA_B JOA_B N/A N/A N/A N/A

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6455 5/2/2006 7:00:00 AM 5/2/2006 8:00:00 AM 5/2/2 5/2: 1.68 Primary 1.68 1.68 0 1.68 0 IPC Moncton Line A JOA_A JOA_A 650 - Topsheet Unwir Splicer Malfunct Other or Unl neck down N/A

6454 5/2/2006 7:00:00 AM 5/2/2006 8:00:00 AM 5/2/2 5/2: 3.28 Primary 3.28 3.28 0 3.28 0 IPC Moncton Line A JOA_A JOA_A N/A N/A N/A N/A

6453 5/2/2006 7:00:00 AM 5/2/2006 8:00:00 AM 5/2/2 5/2: 10.17 Primary 10.17 10.17 10.1 0 10.1 0 IPC Moncton Line A JOA_A JOA_A 350 - Tape Tab Glue Other or Unknov Other or Unl tab glue he Maint. Mech

6452 5/1/2006 11:00:00 PM 5/2/2006 <NULL <NUI <NULL> <NULL> <NULL> <NU <NULL> <NULL> <NULL> <NULL> IPC Moncton Line A JOA_A JOA_A N/A N/A N/A N/A

1 Modules: 6 Contexts (6 Running, 0 Error, 0 Unregistered, 0 OutOfService)

Transfer

Input Tags

Output Tags

Contexts

ivmonwnt313

Daily_Calculation

Differential

Transfer

Input Tags

Output Tags

Contexts

ivmonwnt313(Downtime Modules)IPCMonctonLine AJOA_AISQL Transfer

ivmonwnt313(Downtime Modules)IPCMonctonLine BJOA_BISQL Transfer

ivmonwnt313(Downtime Modules)IPCMonctonLine CJOA_CISQL Transfer

ivmonwnt313(Downtime Modules)IPCMonctonLine CJOA_CISQL Transfer Fixed Inter

ivmonwnt313(Downtime Modules)IPCMonctonLine BJOA_BISQL Transfer Fixed Inter

ivmonwnt313(Downtime Modules)IPCMonctonLine AJOA_AISQL Transfer Fixed Inter

Equivalent_Standard_Cases

Filtered_Delay

First_Diapers_Actual

First_Diapers_Previous

First_Diapers_Target

GenentDowntimeCalculationModule

IPC_General_Data

IPC_Production_Report_Calculations

MillPreviousShift

Name Status/Value Since Schedule Output Tags

Current Status On 4/26/2006 5:35:03 PM

Context Summary

DueDataTransfer(Transfer(Wr... On 4/26/2006 5:35:03 PM Clock (360... 0

DueDataTransfer(Transfer(Wr... On 4/26/2006 5:35:03 PM Clock (360... 0

DueDataTransfer(Transfer(Wr... On 4/26/2006 5:35:03 PM Clock (360... 0

DueDataTransfer(Transfer(Wr... On 4/26/2006 7:06:17 AM Clock (360... 0

DueDataTransfer(Transfer(Wr... On 4/26/2006 7:06:18 AM Clock (360... 0

DueDataTransfer(Transfer(Wr... On 4/26/2006 7:06:18 AM Clock (360... 0

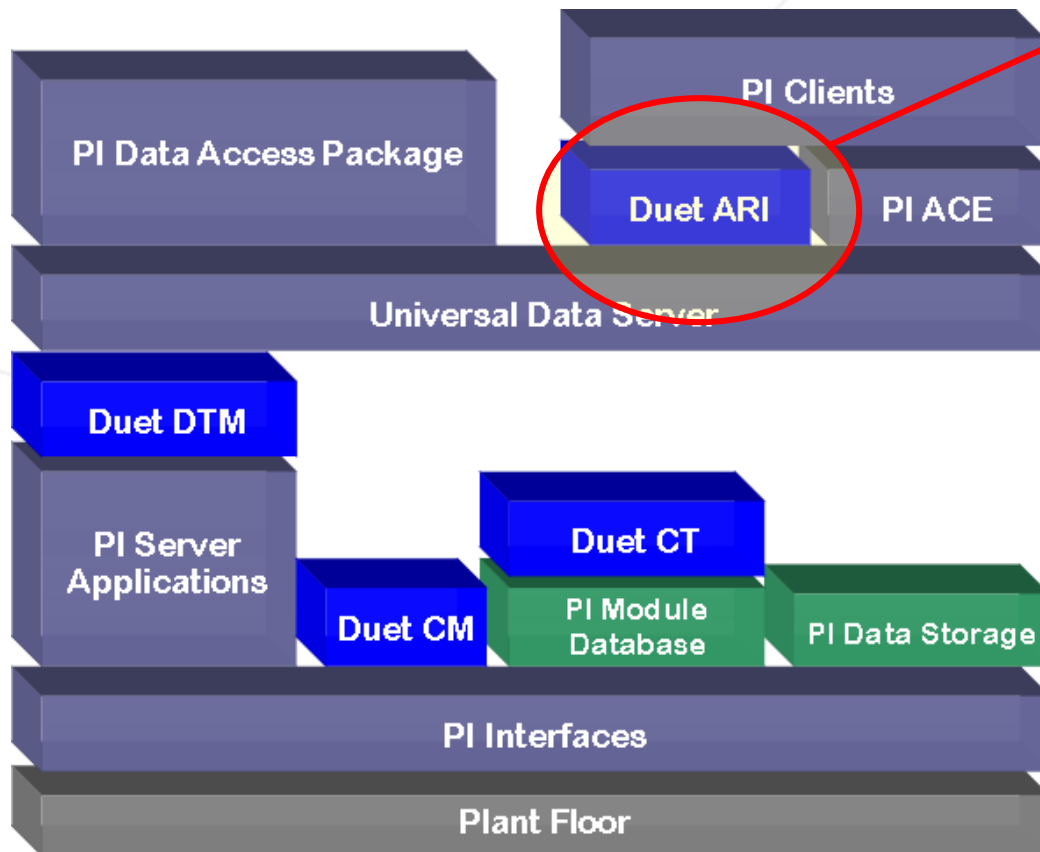
VALUE NOW, VALUE OVER TIME



Solution Description



Duet[™]
Downtime, Uptime & Event Tracking



- **Application Reporting Interface**

- Active X
- Presents Data
- Allows Manual Entry & Validation
- Packages information for easy integration with visual and reporting environments
 - ASP
 - Crystal
 - MS Excel

VALUE NOW, VALUE OVER TIME



Solution Description



Downtime Main Screen - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Home Search Favorites

Duet™ - Main Screen
Machine Selections

Duet™
Downtime, Uptime & Event Tracking

Division
IPC

Plant
Moncton

Line
Line A

Equipment Group

Machine Centre
JOA_A

Add Manual Event Error Report

Validate Events Summary Reports

View Events Validation Report

Start Time End Time

*-1h *

Verify Time

Done Local intranet

- Main Screen
 - Provides Navigation
 - ASP.NET
 - Links:
 - Operator,
 - Manual Entry
 - Validation
 - Reports

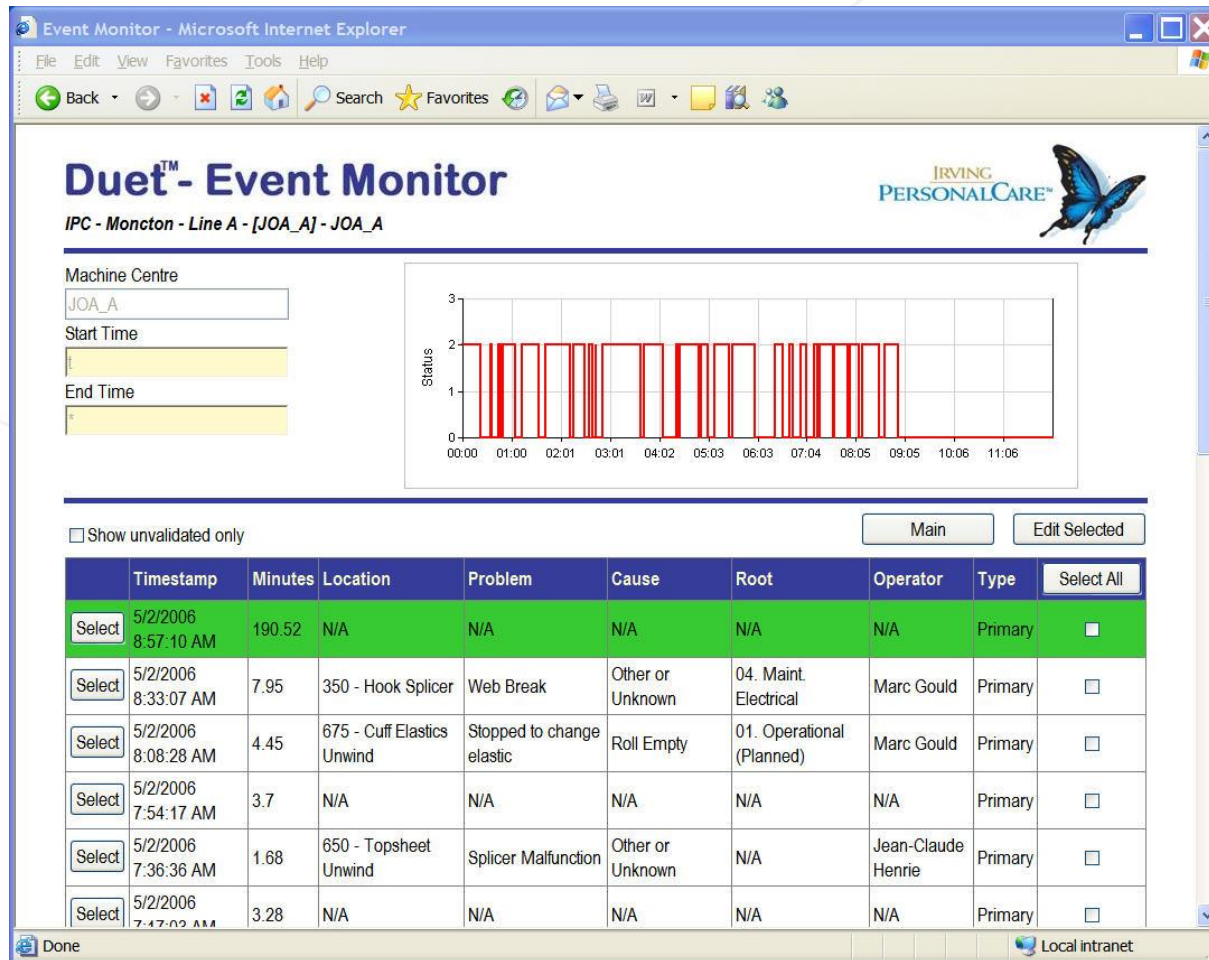
VALUE NOW, VALUE OVER TIME



Solution Description



Duet™
Downtime, Uptime & Event Tracking



- Operator Screen
 - View event
 - ASP.NET

VALUE NOW, VALUE OVER TIME



Solution Description



Duet™
Downtime, Uptime & Event Tracking

Downtime Event - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Home Search Favorites Mail Print Address Book Favorites

Duet™ - Event Details

IRVING PERSONALCARE™

IPC - Moncton - Line A - [JOA_A] - JOA_A

Start Time	End Time	Minutes	Initial Trigger
5/2/2006 8:33:07 AM	5/2/2006 8:41:04 AM	7.95	IPC.Calc.LA.JOA.MACHINE.RUN.CMD = 0

Locations	Problem	Cause	Root Category
350 - Hook Splicer	Web Break	Other or Unknown	04. Maint. Electrical

Crew	Operator	Product
Crew A	Marc Gould	Mainline Product Size 5

Action / Comments

electrician working on unit lost hair net to hook lost battle

Return Save Events < Prev Next >

Split Entry

	Location	Problem	Cause	Root	Crew	Operator	PlanUnplan	Product
Apply	100 - Lower Pulp Feed	Jam	Damaged Roll	09. Raw Materials	Crew B	Jean-Claude Henrie	UnPlanned	Mainline Product Size 5
Apply	250 - Lower Tissue General	Web Break	Tension Break	09. Raw Materials	Crew B	Jean-Claude Henrie	UnPlanned	Mainline Product Size 5
Apply	275 - Core Knife	Jam at Knife	Other or Unknown	N/A	Crew B	Jean-Claude Henrie	N/A	Mainline Product Size 5

Done Local intranet

- Event Screen
 - Edit event

VALUE NOW, VALUE OVER TIME



Solution Description



Duet™
Downtime, Uptime & Event Tracking

Downtime Event - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Home Search Favorites RSS Print Mail New Window

Duet™ - Event Details

IRVING PERSONALCARE™

IPC - Moncton - Line A - [JOA_A] - JOA_A

Start Time	End Time	Minutes	Initial Trigger
5/2/2006 8:33:07 AM	5/2/2006 8:41:04 AM	7.95	IPC.Calc.LA.JOA.MACHINE.RUN.CMD = 0

Locations	Problem	Cause	Root Category
350 - Hook Splicer	Web Break	Other or Unknown	04. Maint. Electrical

Crew	Operator	Product
Crew A	Marc Gould	Mainline Product Size 5

Action / Comments

electrician working on unit lost hair net to hook lost battle

Return Save Events <- Prev Next ->

Split Time ☐ Split With Same Settings ☐ Edit Original

Apply Split Cancel Split Split Entry

	Location	Problem	Cause	Root	Crew	Operator	PlanUnplan	Product
Apply	100 - Lower Pulp Feed	Jam	Damaged Roll	09. Raw Materials	Crew B	Jean-Claude Henrie	UnPlanned	Mainline Product Size 5
Apply	250 - Lower Tissue General	Web Break	Tension Break	09. Raw Materials	Crew B	Jean-Claude Henrie	UnPlanned	Mainline Product Size 5

Done Local intranet

- Event Screen – Split events

VALUE NOW, VALUE OVER TIME



Solution Description



Duet™
Downtime, Uptime & Event Tracking

Downtime Event - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Home Search Favorites

Duet™ - Event Details

IRVING PERSONALCARE™

IPC - Moncton - Line A - [JOA_A] - JOA_A

Start Time	End Time	Minutes	Initial Trigger

Locations	Problem	Cause	Root Category
350 - Hook Splicer	Web Break	Other or Unknown	04. Maint. Electrical

Crew	Operator	Product
Crew A	Marc Gould	Mainline Product Size 5

Action / Comments

electrician working on unit lost hair net to hook lost battle

Return Save Events < Prev Next >

Split Entry

	Location	Problem	Cause	Root	Crew	Operator	PlanUnplan	Product
Apply	100 - Lower Pulp Feed	Jam	Damaged Roll	09. Raw Materials	Crew B	Jean-Claude Henrie	UnPlanned	Mainline Product Size 5
Apply	250 - Lower Tissue General	Web Break	Tension Break	09. Raw Materials	Crew B	Jean-Claude Henrie	UnPlanned	Mainline Product Size 5
Apply	275 - Core Knife	Jam at Knife	Other or Unknown	N/A	Crew B	Jean-Claude Henrie	N/A	Mainline Product Size 5

Done Local intranet

- Event Screen
 - Select multiple events

VALUE NOW, VALUE OVER TIME



Solution Description



Duet[™]
Downtime, Uptime & Event Tracking

http://irvmonwnt313/dt_frontend/DT_ReportMain.aspx - Microsoft Internet Explorer

File Edit View Favorites Tools Help

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Review & Comment Sign Select Text 81%

DOWNTIME REPORT

5/1/2006 8:00:00AM to 5/1/2006 8:00:00PM

IRVING
PERSONALCARE[™]

Division : IPC
Plant : Moncton
Line : Line A

Machine Centre	JOA_A	Timestamp	Minutes	Location	Problem	Cause	RootCategory	Action/Comments	Type	Product Type
1-May-06	7:09:44 pm	17.13	N/A	N/A	N/A	N/A	N/A	N/A	Primary	N/A
1-May-06	6:22:40 pm	8.33	750 - Poly Unwind	Splicer Malfunction	Other or Unknown	02. Operational (Unplanned)	splicer didn't fire		Primary UnPlanned	Mainline Product Size 5
1-May-06	5:48:05 pm	1.98	400 - Combining Roll	Other or Unknown	N/A	04. Maint. Electrical	e/l backsheet		Primary UnPlanned	Mainline Product Size 5
1-May-06	5:26:56 pm	3.65	400 - Combining Roll	Other or Unknown	Other or Unknown	02. Operational (Unplanned)	backsheets e/l ear fell on sensor		Primary UnPlanned	Mainline Product Size 5
1-May-06	5:01:15 pm	2.22	400 - Combining Roll	Other or Unknown	Other or Unknown	02. Operational (Unplanned)	backsheets e/l ear fell on sensor		Primary UnPlanned	Mainline Product Size 5
1-May-06	4:52:01 pm	9.05	675 - Cuff J-Fold	Other or Unknown	Other or Unknown	06. Raw Materials	cuff broke out		Primary UnPlanned	Mainline Product Size 5
1-May-06	4:38:05 pm	10.33	500 - Leg Elastic Unwind	Stopped to change elastic	Other or Unknown	01. Operational (Planned)	changed and cleaned line		Primary Planned	Mainline Product Size 5
1-May-06	3:49:01 pm	2.00	400 - Combining Roll	Other or Unknown	Other or Unknown	09. Raw Materials	backsheets missing at chill roll		Primary UnPlanned	Mainline Product Size 5
1-May-06	3:31:54 pm	2.90	Optima	Optima Bagging	Bag Pickup	09. Raw Materials	bags out of spec		Primary UnPlanned	Mainline Product Size 5
1-May-06	3:24:42 pm	3.82	350 - Tab Unwind/Splicer	Material Problem	Other or Unknown	02. Operational (Unplanned)	tab folded at splice extra roll for supreme restricting dancer movement making slack in web		Primary UnPlanned	Mainline Product Size 5
1-May-06	3:04:00 pm	2.13	Optima	Optima Sealing	Other or Unknown	02. Operational (Unplanned)	bag not picking up jam welding jaws		Primary UnPlanned	Mainline Product Size 5
1-May-06	2:54:30 pm	5.82	400 - FE S/C	Contamination	Glue Build Up	02. Operational (Unplanned)	glue on puck		Primary UnPlanned	Mainline Product Size 5
1-May-06	2:12:06 pm	3.12	750 - Poly Unwind	Splicer Malfunction	Other or Unknown	04. Maint. Electrical	did not finish sequence		Primary UnPlanned	Mainline Product Size 5
1-May-06	2:02:00 pm	3.80	750 - Poly Unwind	Splicer Malfunction	Other or Unknown	02. Operational (Unplanned)	splicer failed sequence		Primary UnPlanned	Mainline Product Size 5
1-May-06	1:22:49 pm	20.73	275 - Core Knife	Pad Wrapped Around Knife	N/A	04. Maint. Electrical	core missing at core knife sensor changed		Primary UnPlanned	Mainline Product Size 5
1-May-06	1:20:32 pm	1.48	275 - Core Knife	Position Error	Other or Unknown	04. Maint. Electrical	sensor problems		Primary UnPlanned	Mainline Product Size 5

- Validation Report

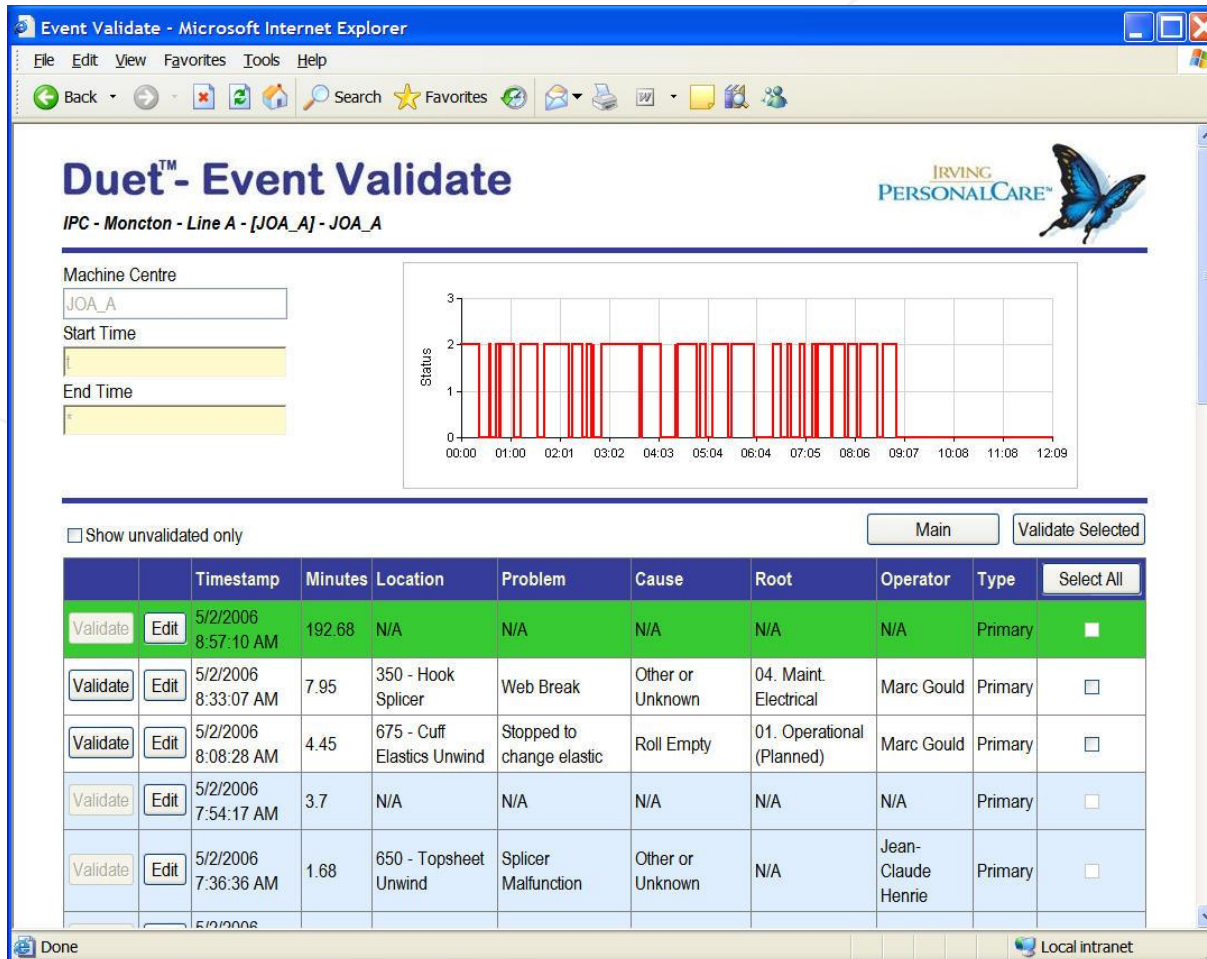
VALUE NOW, VALUE OVER TIME



Solution Description



Duet™
Downtime, Uptime & Event Tracking



- Validation Screen
 - Trends
 - Tabulates

VALUE NOW, VALUE OVER TIME



Solution Description




Duet™
Downtime, Uptime & Event Tracking

Downtime Manual Entry - Microsoft Internet Explorer



File Edit View Favorites Tools Help

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Duet™ - Manual Entry

IRVING PERSONALCARE™ 

IPC - Moncton - Line A - [JOA_A] - JOA_A

Start Time 	End Time 	Minutes
<input type="text" value="t"/>	<input type="text" value="*"/>	<input type="text" value="730.6"/>

Locations	Problem	Cause	Root Category
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Crew	Operator	Product
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Action / Comments

Done Local intranet

- Event Screen
– Manual entry

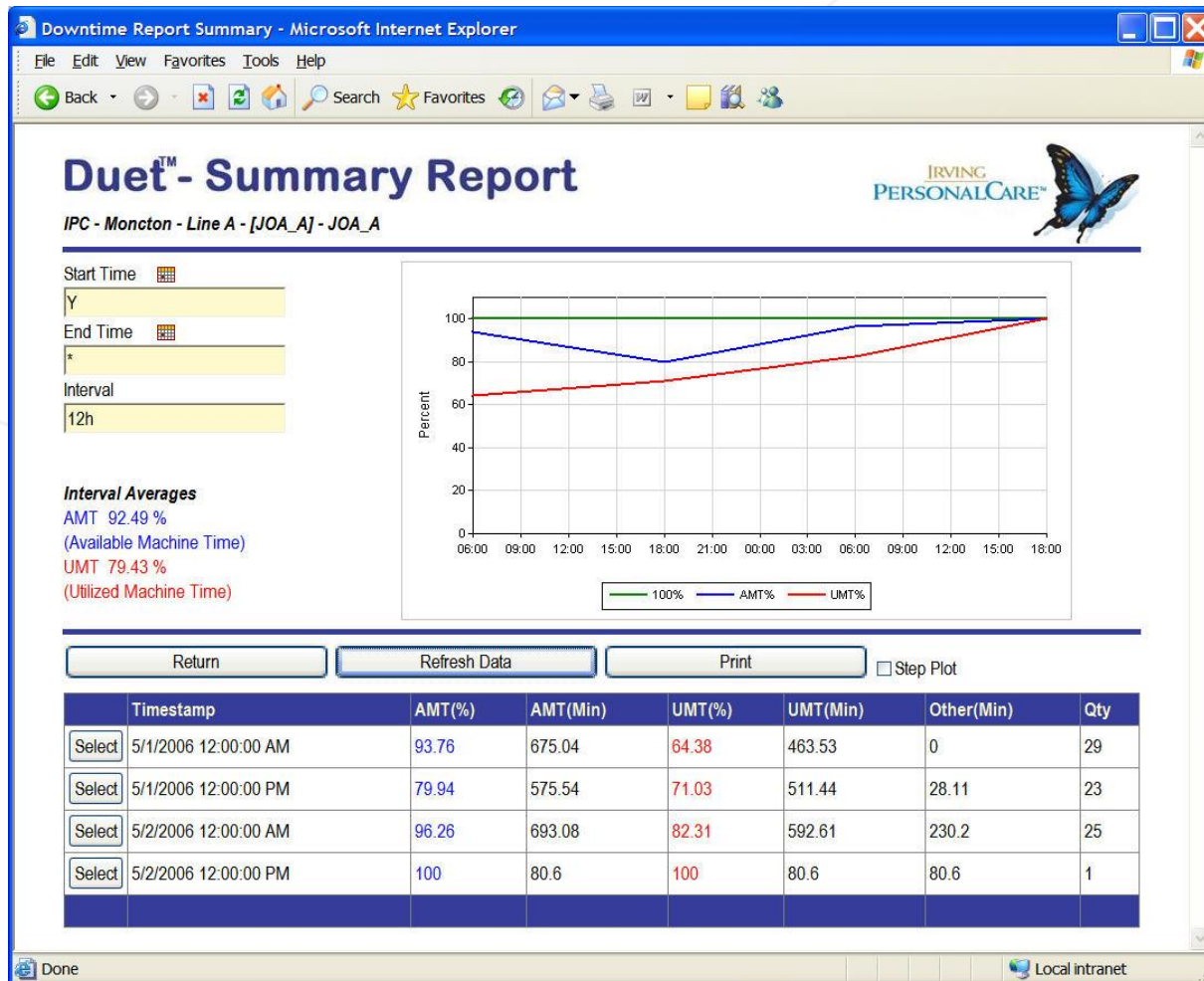
VALUE NOW, VALUE OVER TIME



Solution Description



Duet™
Downtime, Uptime & Event Tracking



- Reports
 - Summary
 - WEB or PDF

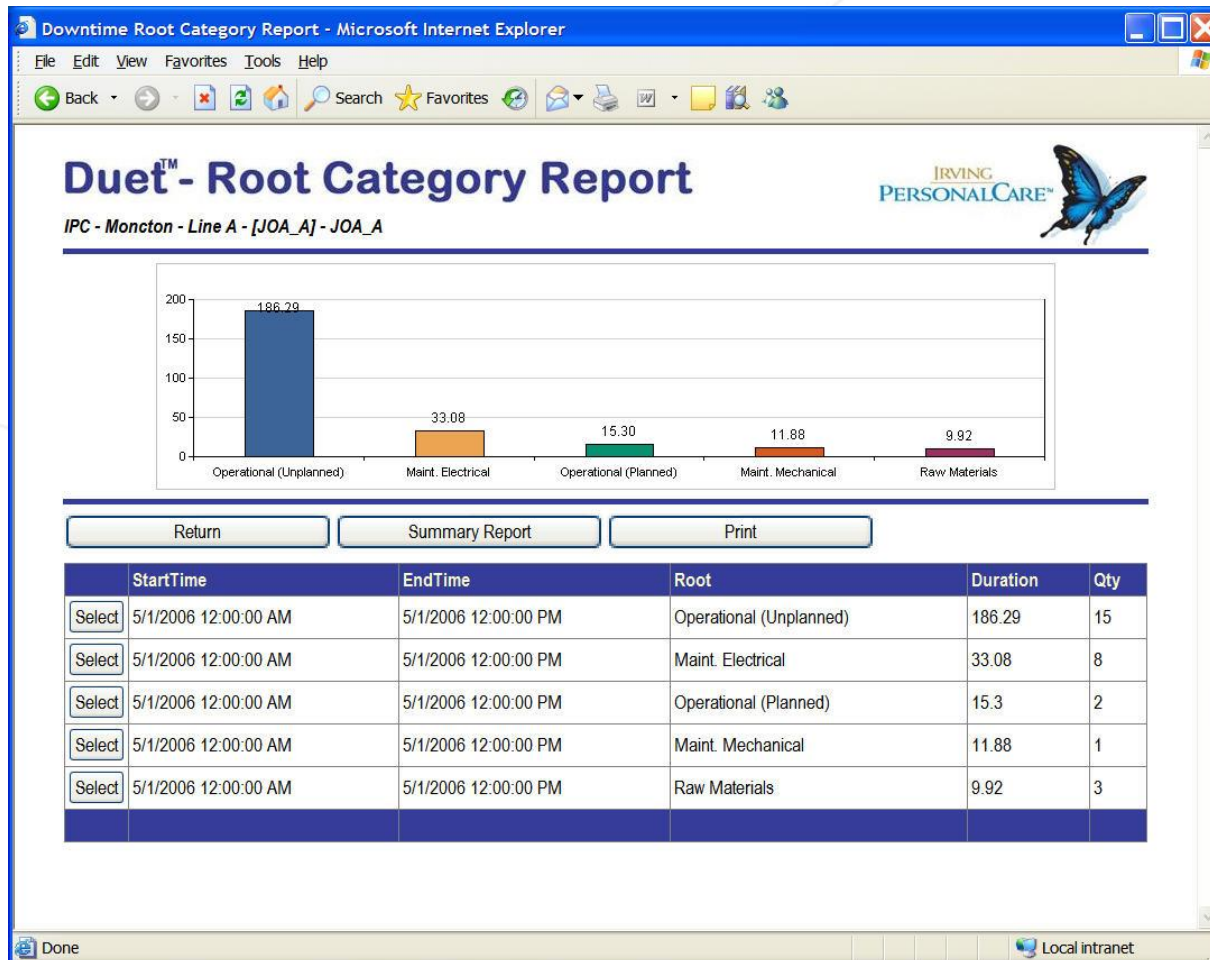
VALUE NOW, VALUE OVER TIME



Solution Description



Duet™
Downtime, Uptime & Event Tracking



- Reports
 - Root Cause
 - WEB or PDF

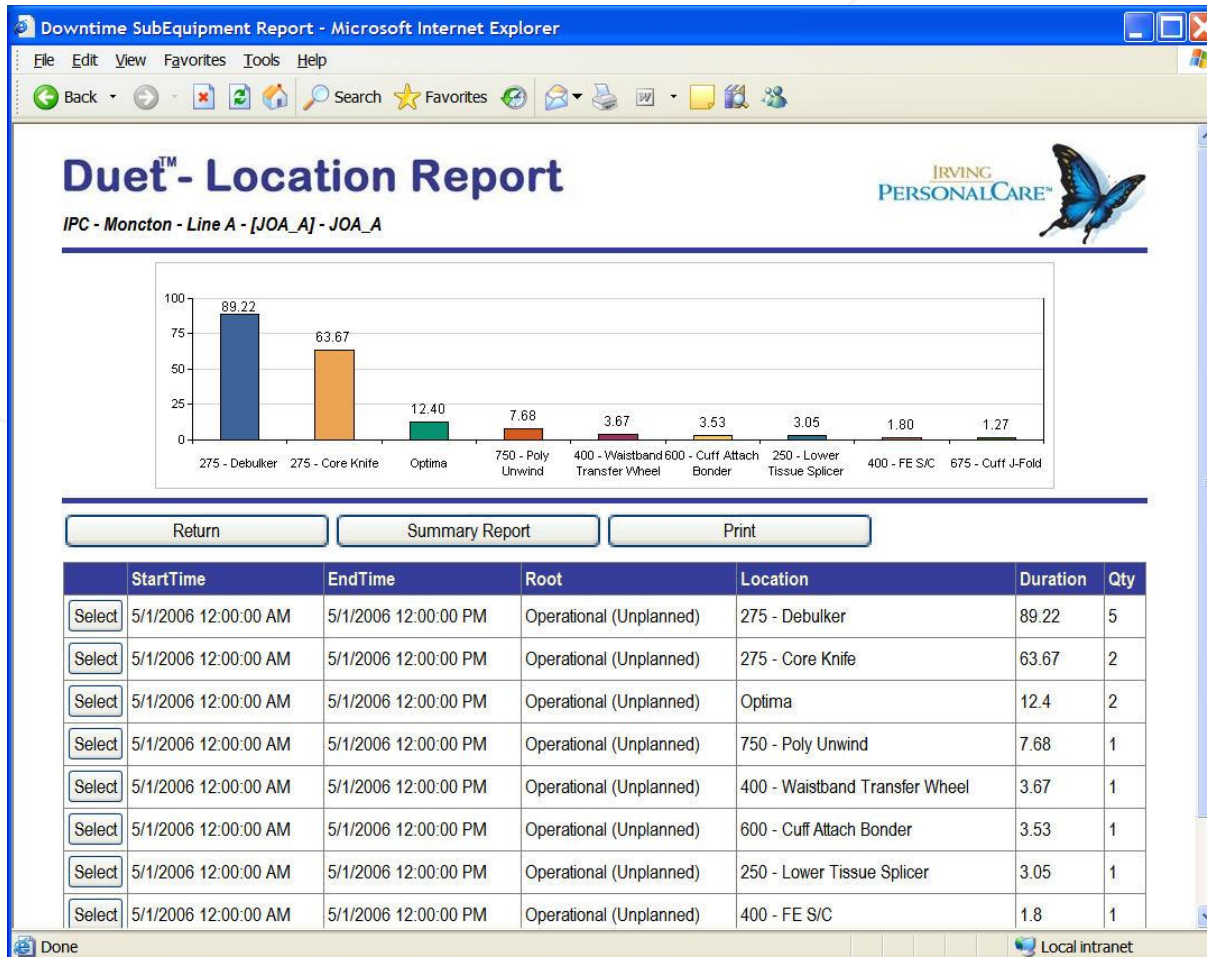
VALUE NOW, VALUE OVER TIME



Solution Description



Duet™
Downtime, Uptime & Event Tracking



- Reports
 - Location
 - WEB or PDF

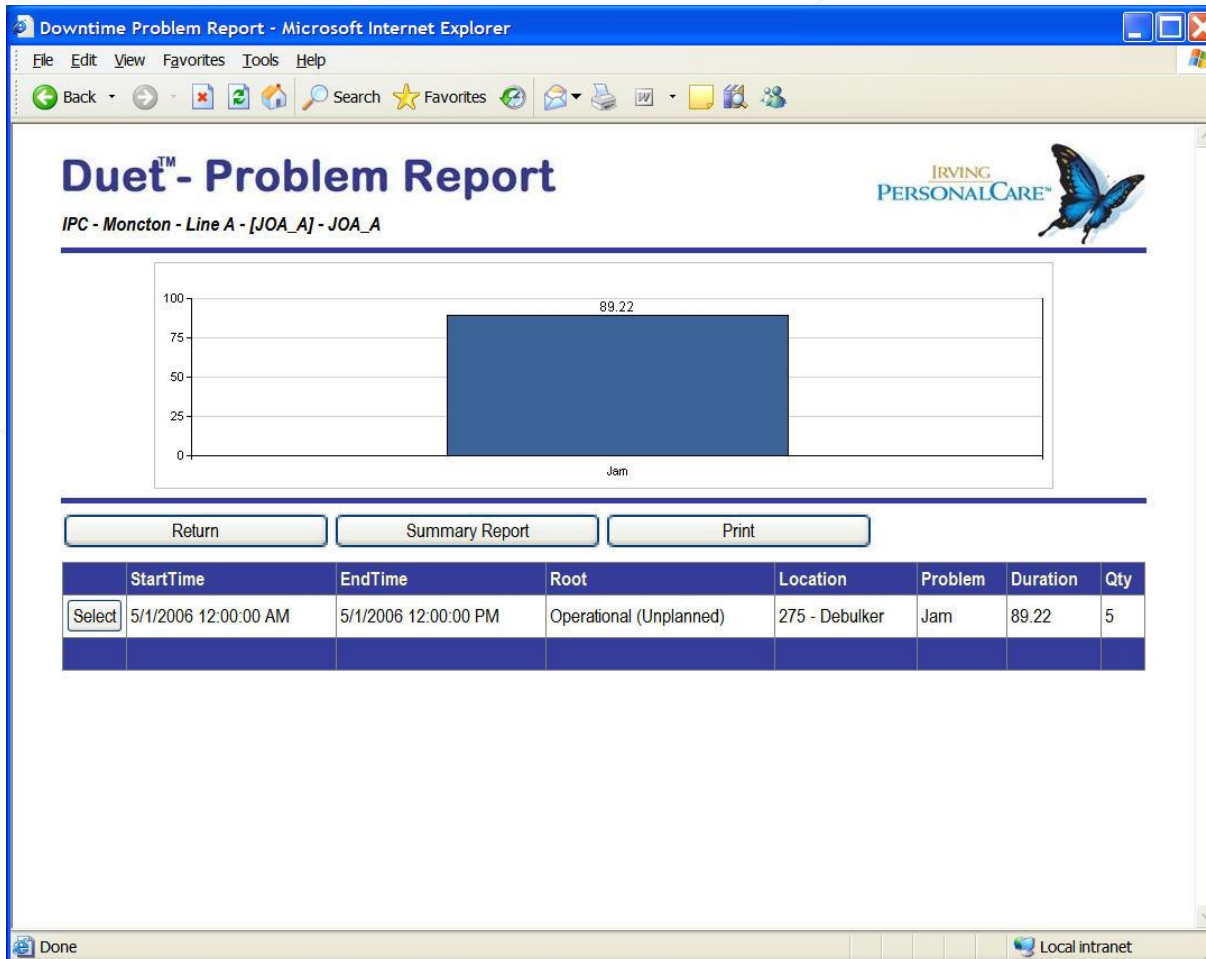
VALUE NOW, VALUE OVER TIME



Solution Description



Duet™
Downtime, Uptime & Event Tracking



- Reports
 - Problem
 - WEB or PDF

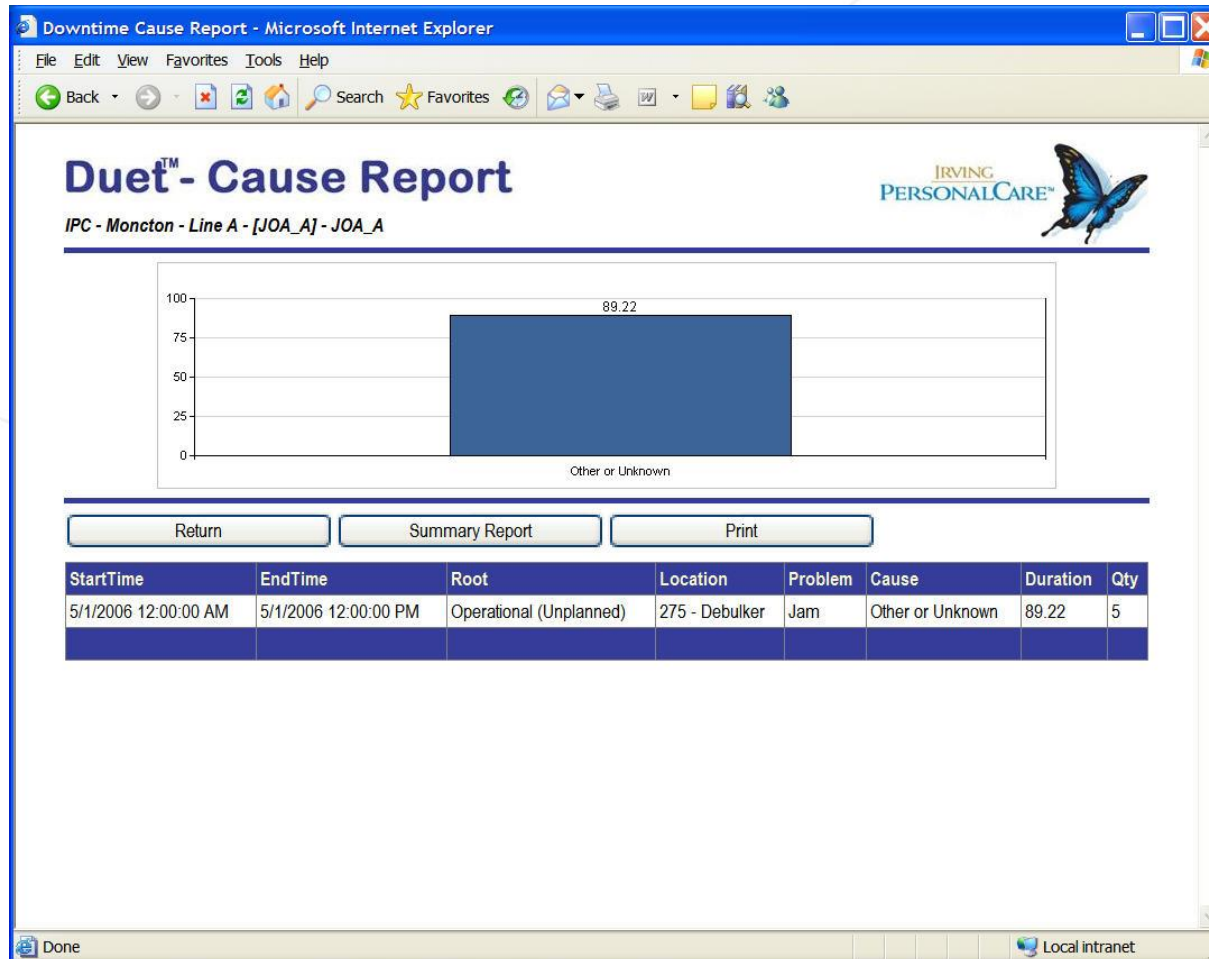
VALUE NOW, VALUE OVER TIME



Solution Description



Duet™
Downtime, Uptime & Event Tracking



- Reports
 - Cause
 - WEB or PDF

VALUE NOW, VALUE OVER TIME

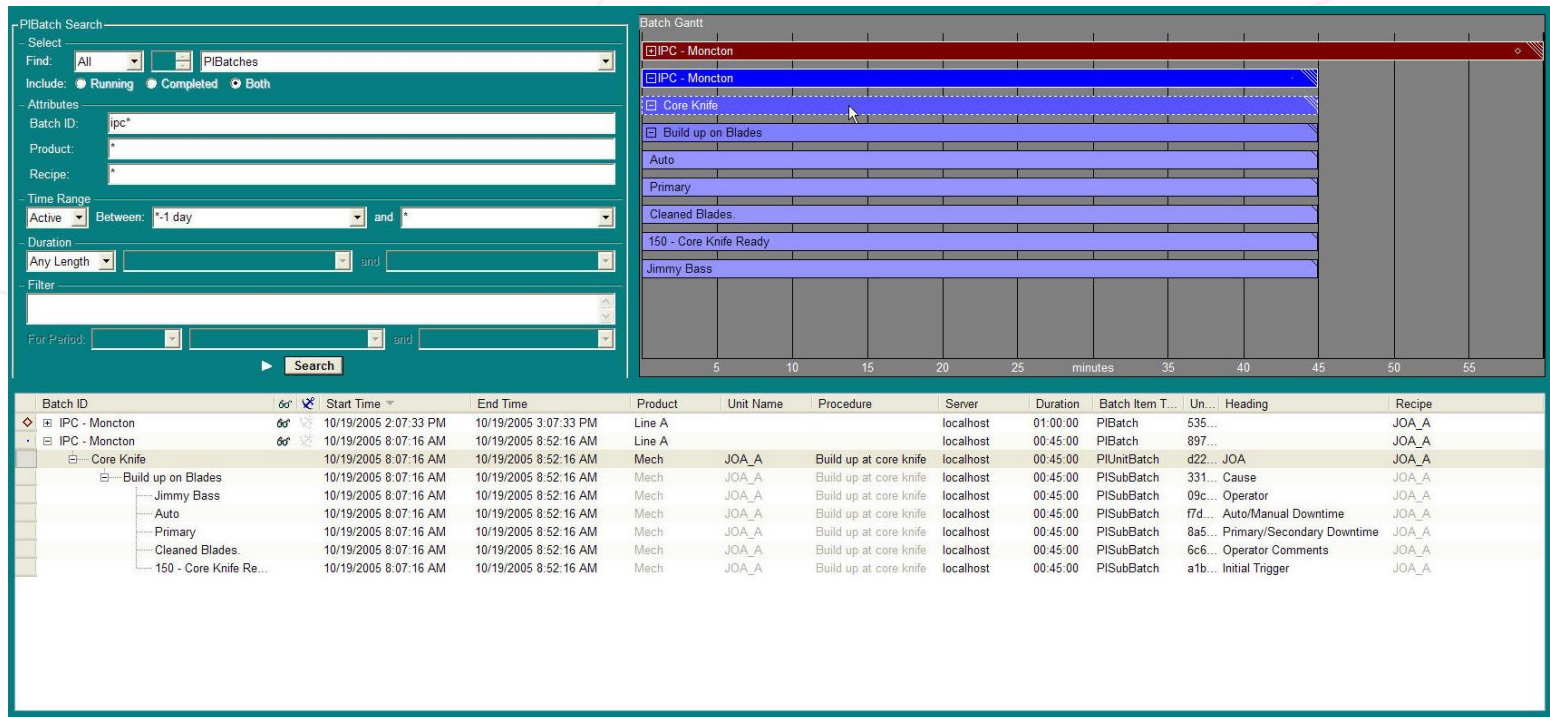


Solution Description



Duet™
Downtime, Uptime & Event Tracking

- Analysis and Trouble Shooting



VALUE NOW, VALUE OVER TIME



Benefits



- Increased profits from focused plant production improvements.
- Standardized and automated delivery of real time plant equipment KPI's and related information, across your organization.
- Improved Root Cause data for in-depth analysis.

VALUE NOW, VALUE OVER TIME



Benefits



- Centralized data
- Scalable to roll out across plants
- Built on Standard Tools (Microsoft and OSIsoft)
- Web Based
- True tracking of Unplanned Downtime duration
- Highlights Bottlenecks and Problems

VALUE NOW, VALUE OVER TIME



Future Plans



- Irving Group
 - Roll out the downtime system to plants across the organization
 - Use the data to focus on areas requiring improvement

VALUE NOW, VALUE OVER TIME



Future Plans



- ADM Systems Engineering
 - Foundation
 - .Net 2.0
 - MS Studio 2005

VALUE NOW, VALUE OVER TIME



Summary



- The project delivered a corporate downtime system that is
 - Simple, easy to use and understood
 - integrated with plant controls in real time
 - functionally transparent in plants with no control
 - integrated with corporate MSSQL databases for business applications and WEB based reporting

VALUE NOW, VALUE OVER TIME



Summary



- The project delivered a corporate downtime system that is
 - Being accepted in other plants
 - Providing a tool to focus efforts to improve efficiency and increase profits

VALUE NOW, VALUE OVER TIME





Duet™
Downtime, Uptime & Event Tracking

- Thank you
- Questions?

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