Orbital ATK Costpoint and OPP Integration

July 28, 2016 – Heather Green & Mary Bedsworth

Objectives

- Costpoint & Open Plan Integration Opportunities
- Best Practices Within Costpoint & Open Plan to Ensure Accurate Integration
- Management of Schedule Dates in Open Plan & Costpoint
- Integration of Schedule Dates from Open Plan to Costpoint
- Integration of Schedule Status from Costpoint to Open Plan
- Maintain Data Alignment
- Exception Reporting & Metrics (To Validate Integration)

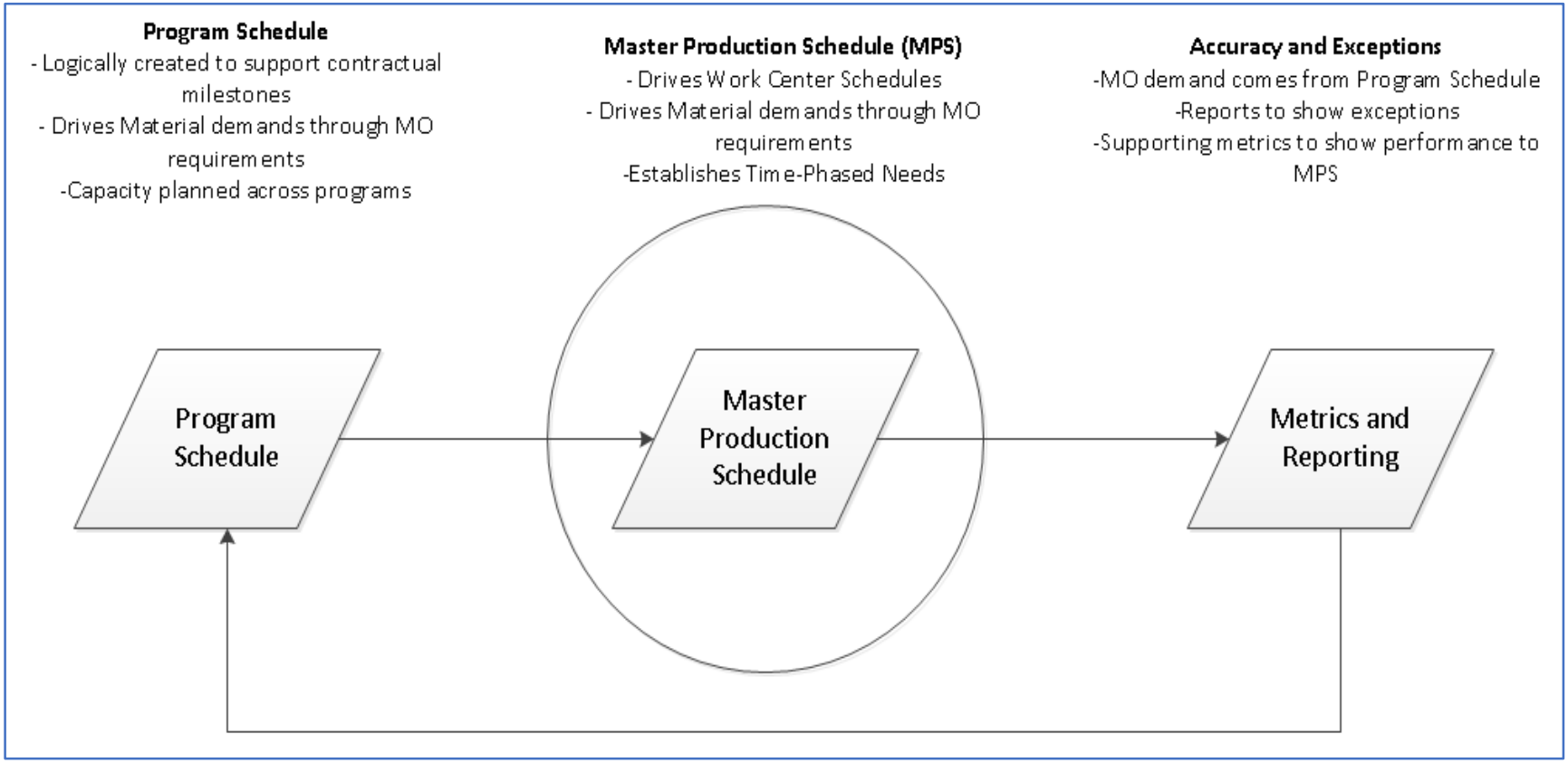
Costpoint & Open Plan Integration Opportunities

- Programs require a program schedule to
  - Plan scope and budget
  - Meet reporting requirements
  - Communicate to stakeholders (internal and external)
- Manufacturing requires manufacturing orders
  - Scope execution – how many to build, specific configuration
  - Cost collection level/method is established
  - Facilitates configuration control: part number, serial number, lot number, quality certifications

Costpoint & Open Plan Integration Opportunities

- Moves to “One Schedule”
  - Improves data accuracy
  - Reduces errors/omissions
- Reduces (with goal to eliminate) duplicate data entry
- Creates a common communication tool between the Programs and Manufacturing
- Creates a way to determine priorities across programs

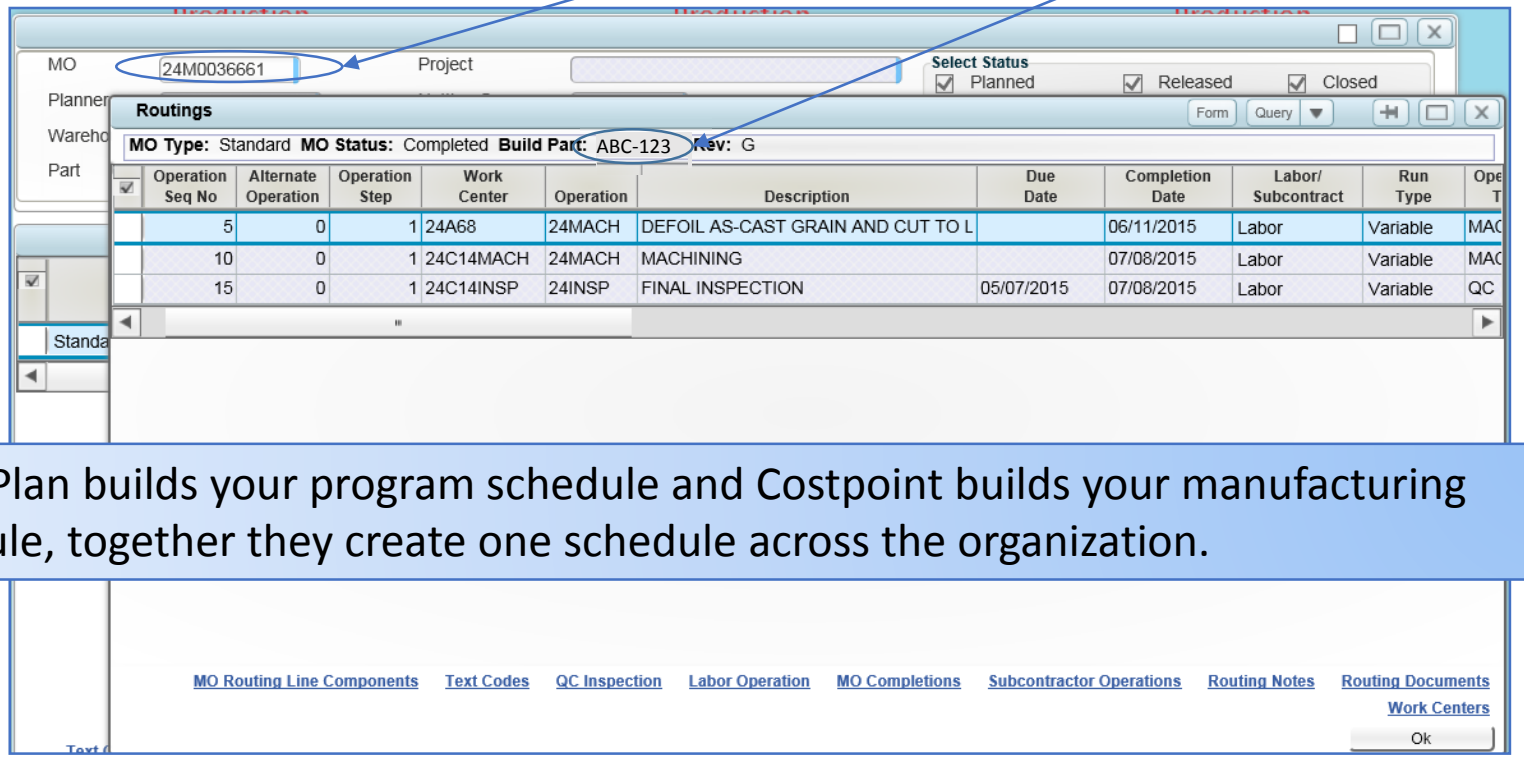
Costpoint & Open Plan Integration Opportunities



MMAS requires 95% Schedule Accuracy: Costpoint / Open Plan integration drives schedule accuracy

Costpoint & Open Plan Integration Opportunities

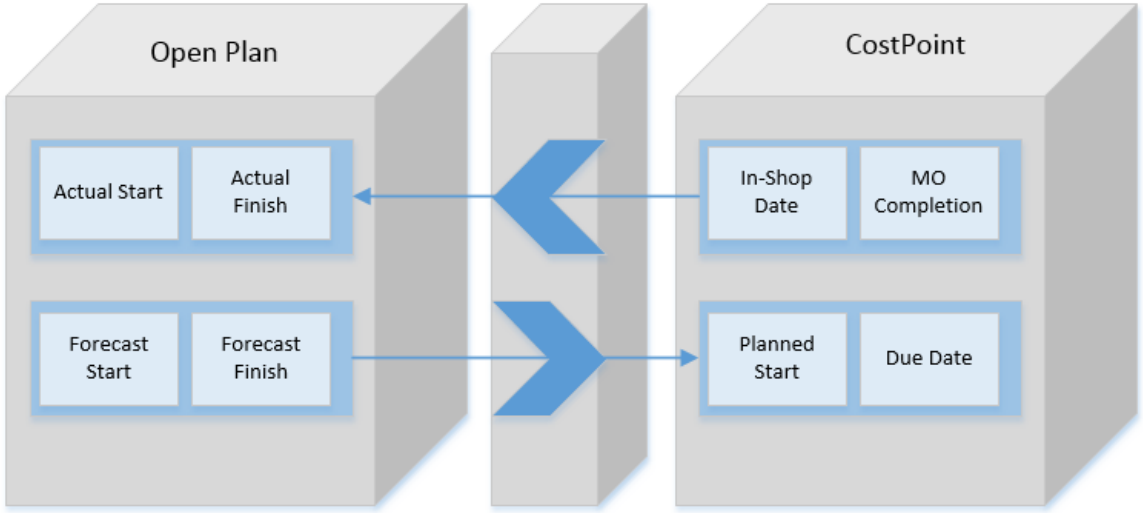
Activity ID	Activity Desc.	Serial # (UCF 04)	ELK_BUILD	MO# (UCF 01)	Inventory Abbrev (UCF 06)	ELK_CRITERIA	Part # (UCF 05)	Quantity (UCF 03)
E1147.3.14	ACS Components							
E1147.3.14.1	Machine ACS Grain							
E1147.3.14.1.6	SPA Perform M&IR ABCDEFR ACS Propellant Grain Machine (Lot 6)	S15M-0031930 thru 31937		24EM036567	E510DB		ABC-123	8
E1147.3.14.1.7	Perform M&IR ABCDEFR ACS Propellant Grain Machine (Lot 7)	S15M-0031938 thru 31945		24M0036661	E510DB	10 MFG/ASSY/INT	ABC-123	8
E1147.3.14.1.8	Perform M&IR ABCDEFR ACS Propellant Grain Machine (Lot 8)	S15M-0031946 thru 31953		24M0036662	E510DB	10 MFG/ASSY/INT	ABC-123	8



Open Plan builds your program schedule and Costpoint builds your manufacturing schedule, together they create one schedule across the organization.

Best Practices Within Costpoint & Open Plan To Maintain Accurate Integration

- Define Clear, Specific Rules of Engagement
  - Program Need Dates – Maintain in Open Plan
  - Actual Start & Finish Dates – Maintain in Costpoint
  - Future MO Forecast Dates – Maintain in Open Plan

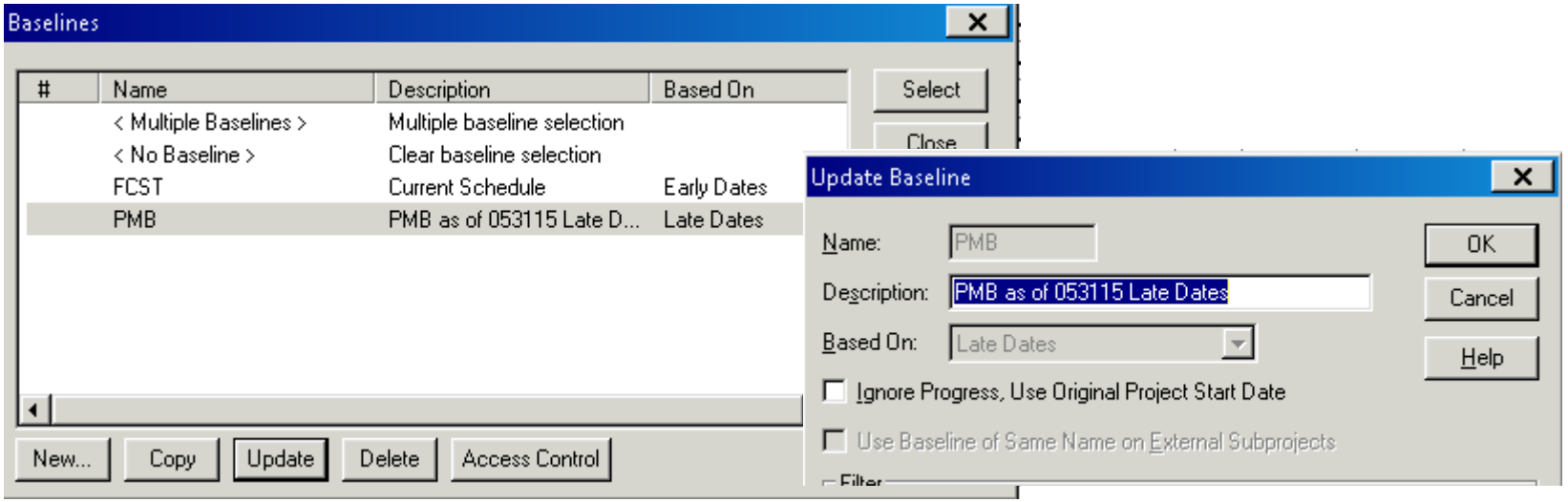


Best Practices Within Costpoint & Open Plan To Maintain Accurate Integration

- Define the process (and timing) to integrate Open Plan and Costpoint
  - Manually – for a specific project
  - Employ Open Plan General Import functionality to load multiple (or all) projects
  - When is Costpoint updated?
  - When is Open Plan updated?
  - What happens when either system isn’t updated, as expected?

Best Practices Within Costpoint & Open Plan To Maintain Accurate Integration

- Define Clear Schedule Execution Expectations
  - Baseline to Late Dates
  - Execute to Early Dates
  - Naming standards for Open Plan schedules and PMB baseline
  - Which projects? What does “All Projects” really mean?



Best Practices Within Costpoint & Open Plan To Maintain Accurate Integration

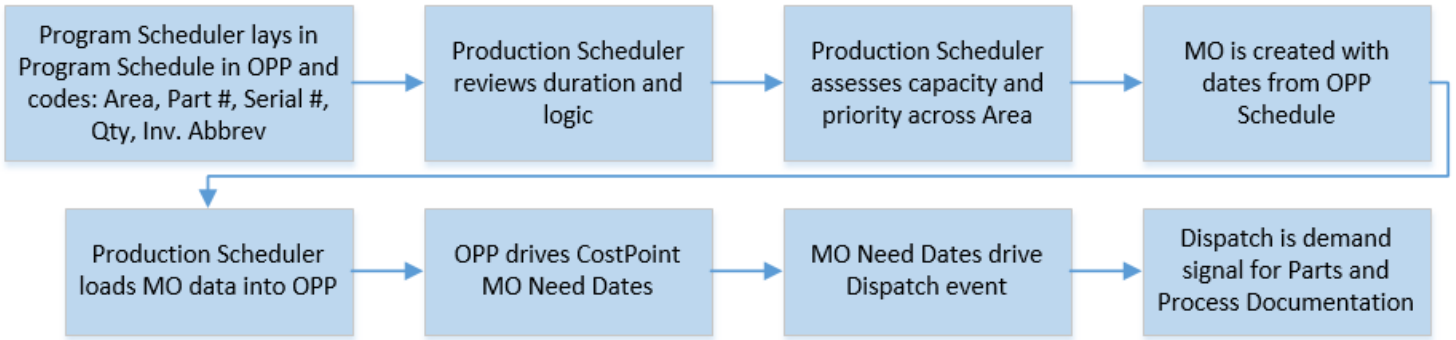
- Establish Ground Rules to Maintain Error-Free Integration
  - One activity in OPP to one Costpoint MO
  - Manage Time Now in Open Plan
  - What happens if there are integration errors?

Activity ID	Activity Desc.	_Status_Check_Explanation	MO# (UCF 01)
E2266.4.10.10.10.10.10.18	Install Inserts Fwd Polar Boss (Lot 6)		24M0042842
E2266.4.10.10.10.10.10.20	Machine P2 Igniter Nozzle Insert		
E2266.4.10.10.10.10.10.20.1	Machine P2 Igniter Nozzle Insert (Lot 1)	Progress Type is Complete and No Actual Finish Date is Entered	24M0039283
E2266.4.10.10.10.10.10.20.2	Machine P2 Igniter Nozzle Insert (Lot 2)		24M0039284

Utilize Calculated Fields or User Defined Validations to identify errors with status

Best Practices Within Costpoint & Open Plan To Maintain Accurate Integration

- Define Roles and Responsibilities
  - Actual Start and Actual Finish Dates – Production Scheduler (Costpoint)
  - Expected Finish – Production Scheduler (Costpoint)
  - Creation of new scope/contractual changes – Program Scheduler (Open Plan)
  - Schedule changes to address capacity limitations – Production Scheduler
    - Changes must meet program specific baseline dates



Best Practices Within Costpoint & Open Plan To Maintain Accurate Integration

- Develop Reports to Identify Missing Data

Acitivities Missing MO ID

Report ID: OPP001EA

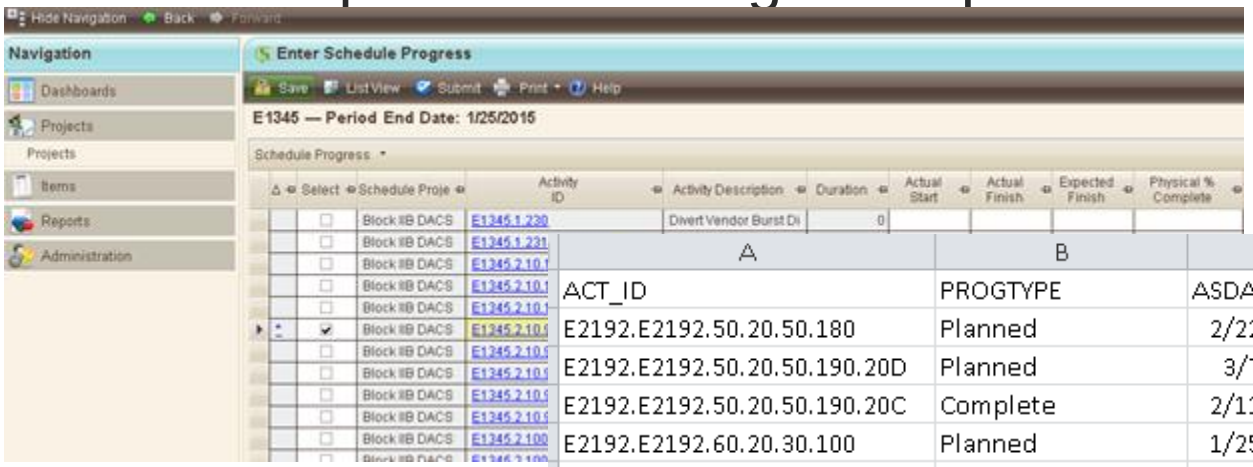
Ordered by Activity ID

Activity ID	Description	MO ID	Early Start Date	Early Finish Date	Duration	Qty	Part ID	Invt Abbrv Code	Task Criteria	VSET
E1147.3.13.2.23.4	Perform M&IR 1014-48714 Heavyweight Gas Generator Assy (Lot 2D)	TBD	10/20/15	10/30/15	8d	4	E48714-17	E510DE	10 MFG/ASSY/INT	V3
E1147.3.20.3.5.1	M1 Perform M&IR 1014_REGULATOR_ATP ACS ATP	TBD	10/28/15	10/28/15	1d	1	E55550-09	E510DK	11 TEST	V3
E1147.3.20.3.5.15	M15 Perform M&IR 1014_REGULATOR_ATP ACS ATP (MSU-19)	TBD	12/16/15	12/16/15	1d	1	E58630-05	E510DK	11 TEST	V3
E1147.3.20.3.5.2	M2 Perform M&IR 1014_REGULATOR_ATP ACS ATP	TBD	10/30/15	10/30/15	1d	1	E55550-09	E510DK	11 TEST	V3
E1147.3.20.3.5.3	M3 Perform M&IR 1014_REGULATOR_ATP ACS ATP	TBD	11/4/15	11/4/15	1d	1	E55550-09	E510DK	11 TEST	V3
E1147.3.20.3.5.30	M30 Perform M&IR 1014_REGULATOR_ATP ACS ATP (MSU-20)	TBD	2/15/16	2/15/16	1d	1	E58630-05	E510DK	11 TEST	V3
E1147.3.20.3.5.45	M45 Perform M&IR 1014_REGULATOR_ATP ACS ATP (MSU-21)	TBD	4/6/16	4/6/16	1d	1	E58630-05	E510DK	11 TEST	V3
E1147.3.20.3.6.1	M1 Perform M&IR 101455550 ACS Assembly	TBD	10/27/15	10/29/15	3d	1	E55550-09	E510DK	10 MFG/ASSY/INT	V3
E1147.3.20.3.6.15	M15 Perform M&IR 101455550 ACS Assembly (MSU-19)	TBD	12/15/15	12/17/15	3d	1	E58630-05	E510DK	10 MFG/ASSY/INT	V3
E1147.3.20.3.6.2	M2 Perform M&IR 101455550 ACS Assembly	TBD	10/29/15	11/2/15	3d	1	E55550-09	E510DK	10 MFG/ASSY/INT	V3
E1147.3.20.3.6.3	M3 Perform M&IR 101455550 ACS Assembly	TBD	11/3/15	11/5/15	3d	1	E55550-09	E510DK	10 MFG/ASSY/INT	V3
E1147.3.20.3.6.30	M30 Perform M&IR 101455550 ACS Assembly (MSU-20)	TBD	2/11/16	2/16/16	3d	1	E58630-05	E510DK	10 MFG/ASSY/INT	V3
E1147.3.20.3.6.45	M45 Perform M&IR 101455550 ACS Assembly (MSU-21)	TBD	4/5/16	4/7/16	3d	1	E58630-05	E510DK	10 MFG/ASSY/INT	V3
E1147.3.3.4.56	SP1 Perform M&IR 99550896 Bond Strake Bracket Assembly	TBD	4/20/16	4/26/16	4d	4	E50896-03	E51033	10 MFG/ASSY/INT	V1
E1147.3.3.4.57	SP2 Perform M&IR 99550896 Bond Strake Bracket Assembly	TBD	4/27/16	5/2/16	4d	4	E50896-03	E51033	10 MFG/ASSY/INT	V1
E1147.3.3.5.56	SP1 Perform M&IR 99551411 Layup Sleeve	TBD	4/21/16	5/2/16	7d	1	E51411-04	E51032	10 MFG/ASSY/INT	V1
E1147.3.3.8.2	Machine P1 Igniter Nose Insulator	TBD	8/31/15	9/11/15	9d	4	E47359-01	E51030	10 MFG/ASSY/INT	V1

Cognos Report identifies where an MO is needed (based on Open Plan activity coding), but not yet created/linked

Management of Schedule Dates in Open Plan

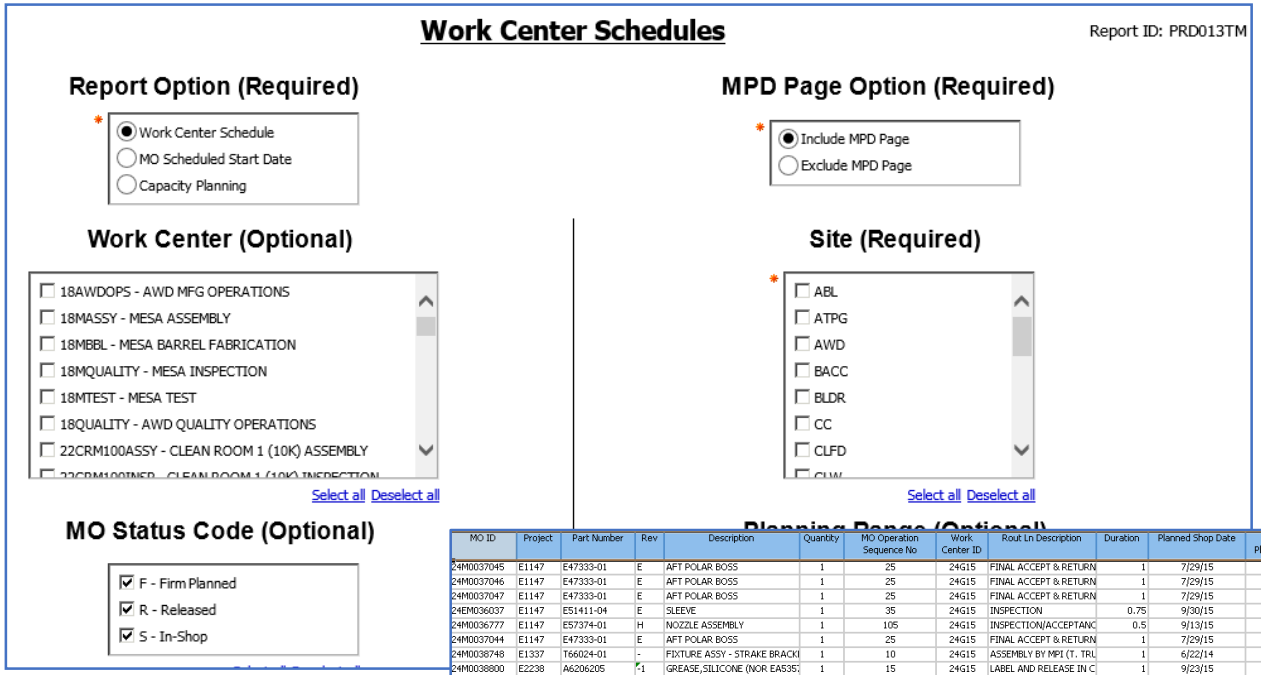
- Open Plan is updated with current status, based on program needs
  - Daily, weekly or monthly
  - Engineering/LOE status via PM Compass
  - Manufacturing status uploaded nightly via General Import from a Cognos report of Costpoint data



	A	B	C	D	E	F	G
	ACT_ID	PROGTYPE	ASDATE	AFDATE	XFDATE	PPC	USER_CHR01
	E2192.E2192.50.20.50.180	Planned	2/22/2016		6/23/2016	50	24EM034091
	E2192.E2192.50.20.50.190.20D	Planned	3/7/2016		8/11/2016	0	24M0042111
	E2192.E2192.50.20.50.190.20C	Complete	2/11/2014	3/22/2016		100	24M0042141
	E2192.E2192.60.20.30.100	Planned	1/25/2016		7/11/2016	80	24M0038060
	E1147.E1147.3.19.37.2.8	Complete	10/19/2015	2/9/2016		100	24EM034536
	E1147.E1147.3.19.42.2.1	Planned	12/14/2015		6/26/2016	0	24EM034541
	E1147.E1147.3.19.43.2.1	Planned	12/14/2015		6/25/2016	0	24EM034542

Management of Schedule Dates in Costpoint

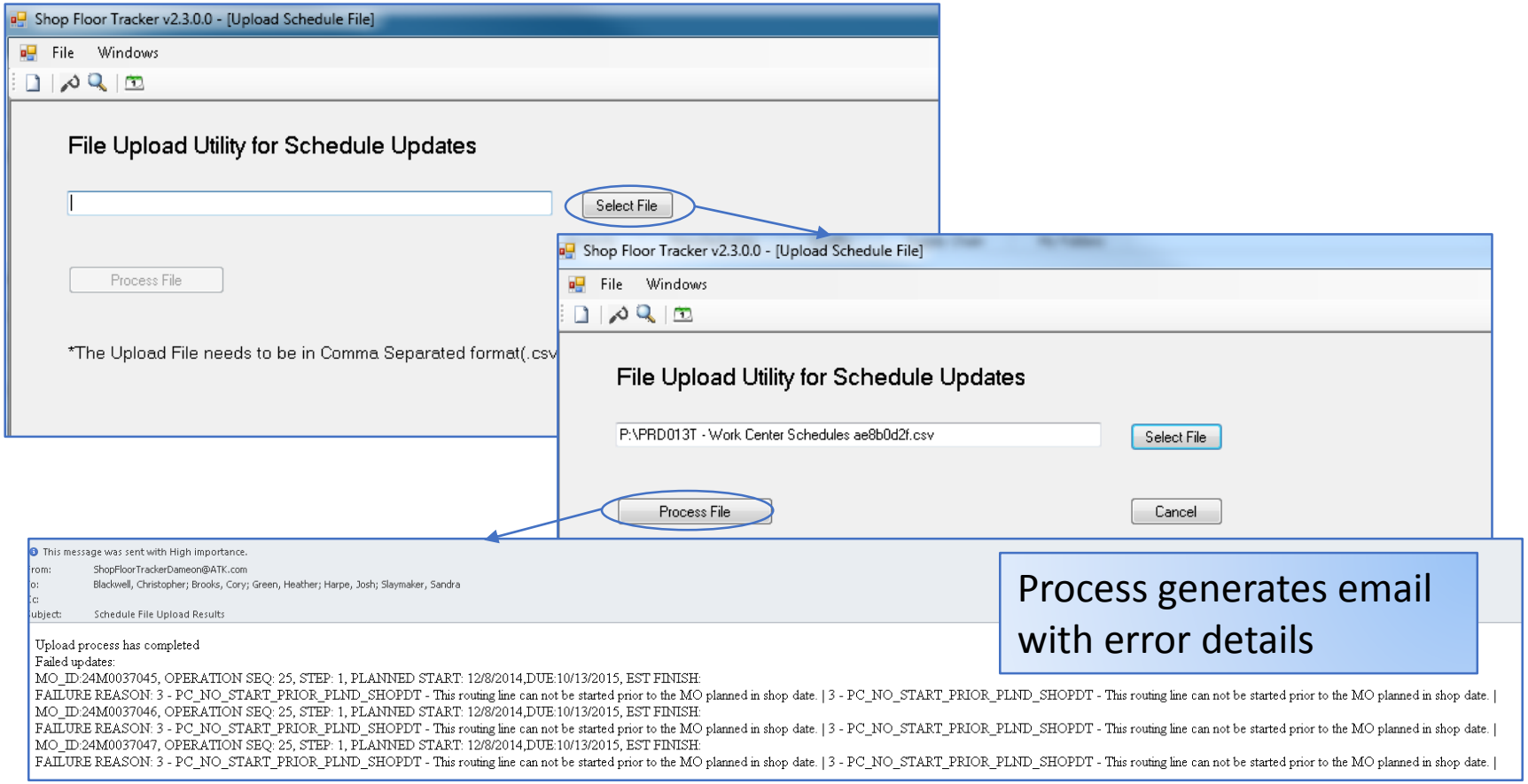
- Cognos report selects data from Costpoint and generates MS Excel spreadsheet that can be easily updated and uploaded into Costpoint



MO ID	Project	Part Number	Rev	Description	Quantity	MO Operation Sequence No	Work Center ID	Rout Ln Description	Duration	Planned Shop Date	MO Rout Ln Planned Start Dt	MO Rout Ln Due Dt	Forecast Start	Forecast Finish	MO Rout Ln Est Compl Dt	MO Status Cd
24M0037045	E1147	E47333-01	E	AFT POLAR BOSS	1	25	24G15	FINAL ACCEPT & RETURN	1	7/29/15		3/31/15	12/8/14	10/13/15		IN-SHOP
24M0037046	E1147	E47333-01	E	AFT POLAR BOSS	1	25	24G15	FINAL ACCEPT & RETURN	1	7/29/15		3/31/15	12/8/14	10/13/15		IN-SHOP
24M0037047	E1147	E47333-01	E	AFT POLAR BOSS	1	25	24G15	FINAL ACCEPT & RETURN	1	7/29/15		3/31/15	12/8/14	10/13/15		IN-SHOP
24EM036037	E1147	E51411-04	E	SLEEVE	1	35	24G15	INSPECTION	0.75	9/30/15		10/8/15	10/13/15	10/13/15		IN-SHOP
24M0036777	E1147	E57374-01	H	NOZZLE ASSEMBLY	1	105	24G15	INSPECTION/ACCEPTANC	0.5	9/13/15		6/17/15	10/13/15	10/13/15		IN-SHOP
24M0037044	E1147	E47333-01	E	AFT POLAR BOSS	1	25	24G15	FINAL ACCEPT & RETURN	1	7/29/15		3/31/15	10/13/15	10/13/15		IN-SHOP
24M0038748	E1337	T66024-01	-	FIXTURE ASSY - STRAKE BRACKI	1	10	24G15	ASSEMBLY BY MPI (T. TRU	1	6/22/14		12/31/15	10/13/15	10/13/15		IN-SHOP
24M0038800	E2238	A6206205	*1	GREASE,SILICONE (NOR EA535	1	15	24G15	LABEL AND RELEASE IN C	1	9/23/15		9/23/15	10/13/15	10/13/15		IN-SHOP
24M0038811	E1171	EP701357-01	X-	THROAT, IGNITER	1	15	24G15	APPEND 'F' TO SERIAL NU	0.5	9/18/15		9/25/15	10/13/15	10/13/15	9/21/15	IN-SHOP
24EM032184	E1337	E47715-02IN	E	INTERSTAGE, INERT USE	1	45	24G15	INSPECTION	2	3/26/15		3/11/14	10/13/15	10/14/15		IN-SHOP
24EM032185	E1337	E47715-02IN	E	INTERSTAGE, INERT USE	1	45	24G15	INSPECTION	2	3/26/15		3/13/14	10/13/15	10/14/15		IN-SHOP
24EM032186	E1337	E47715-02IN	E	INTERSTAGE, INERT USE	1	45	24G15	INSPECTION	2	3/26/15		3/18/14	10/13/15	10/14/15		IN-SHOP
24EM034710	E1147	E47715-02PA	G	INTERSTAGE, PARTIAL (LESS ID	1	25	24G15	INSPECTION	2	10/3/15			10/13/15	10/14/15	9/22/15	IN-SHOP
24M0037244	E1172	EP700482-01	X-	HOUSING, SIMULATOR	6	25	24G15	INSPECTION	2	4/6/15		4/27/15	10/13/15	10/14/15		IN-SHOP
24M0037928	E1147	E48904-03	D	MOLD AND PLUG	1	15	24G15	INSPECTION	1.5	10/3/15		5/30/15	10/13/15	10/14/15		IN-SHOP
24M0038484	E2192	E41946-02	B	MALE MANDREL, AFT BOOT MOL	1	25	24G15	INSPECTION	2	8/3/15		8/5/15	10/13/15	10/14/15	9/18/15	IN-SHOP
24M0038489	E1172	EP700482-01	X-	HOUSING, SIMULATOR	4	25	24G15	INSPECTION	2	8/15/15			10/13/15	10/14/15	9/30/15	IN-SHOP

Management of Schedule Dates in Costpoint

- Home-Grown application uploads Costpoint updates from MS Excel spreadsheet allowing schedulers to manage workcenter/router schedules



Integration of Schedule Dates from Open Plan to Costpoint

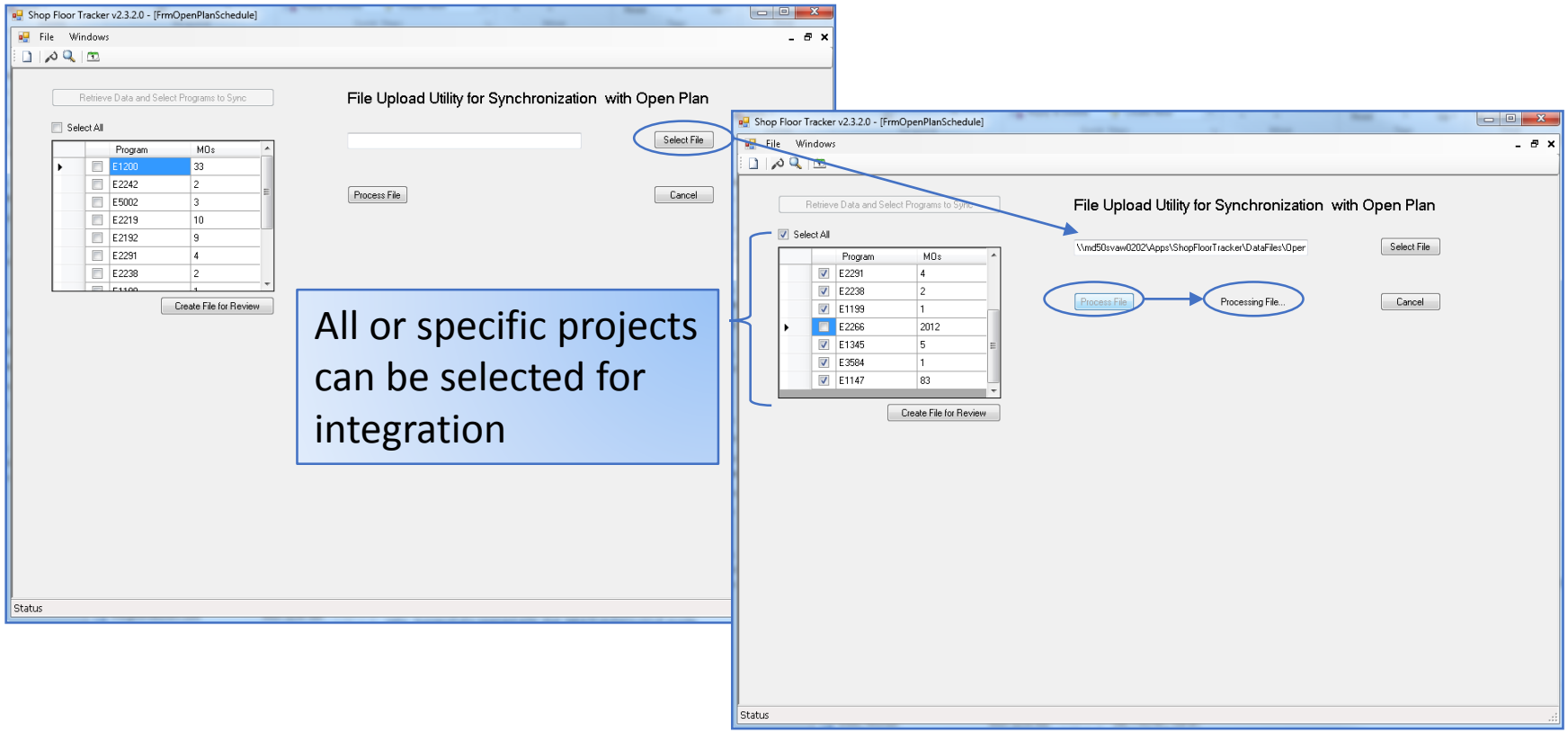
- Specific Open Plan updates flow to Costpoint MOs
  - Open Plan Forecast Start Date updates will modify the Costpoint Planned Start Date
  - Open Plan Forecast Finish Date updates will modify the Costpoint Due Date
  - Time Now management updates future Open Plan activities

Integration of Schedule Dates from Open Plan to Costpoint

- Populating Costpoint fields from Open Plan
  - Ensures that Costpoint reflects the Forecasted Schedule Dates developed by the program scheduler
    - Changes outside of Baseline Late Dates will use Baseline Change Request (BCR) process to modify dates
  - Maintains Open Plan predecessor / successor logic
- Cognos reports are part of the integration process
  - Reports available to preview the data “pulled” from Open Plan
  - Additional reports are available to verify the data “pushed” into Costpoint

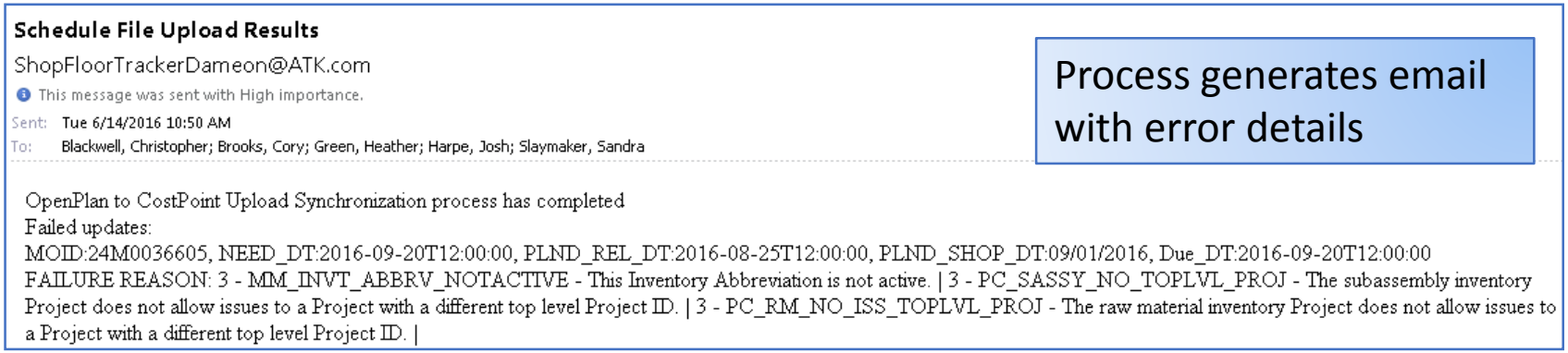
Integration of Schedule Dates from Open Plan to Costpoint

- Home-Grown application simplifies the Open Plan to Costpoint integration



Integration of Schedule Dates from Open Plan to Costpoint

- Home-Grown application includes utility to compare Costpoint and Open Plan
  - After Open Plan update from Costpoint



Schedule File Upload Results

ShopFloorTrackerDameon@ATK.com

This message was sent with High importance.

Sent: Tue 6/14/2016 10:50 AM

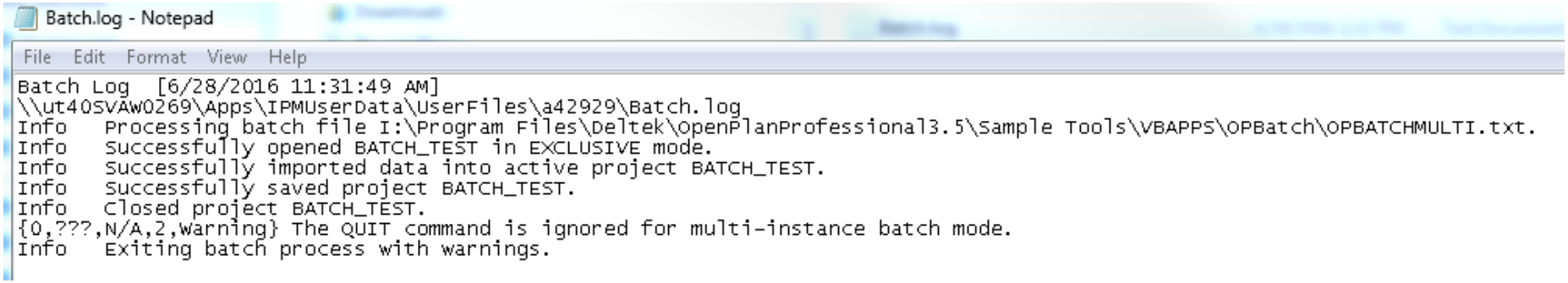
To: Blackwell, Christopher; Brooks, Cory; Green, Heather; Harpe, Josh; Slaymaker, Sandra

Process generates email with error details

OpenPlan to CostPoint Upload Synchronization process has completed
Failed updates:
MOID:24M0036605, NEED_DT:2016-09-20T12:00:00, PLND_REL_DT:2016-08-25T12:00:00, PLND_SHOP_DT:09/01/2016, Due_DT:2016-09-20T12:00:00
FAILURE REASON: 3 - MM_INVT_ABBRV_NOTACTIVE - This Inventory Abbreviation is not active. | 3 - PC_SASSY_NO_TOPLVL_PROJ - The subassembly inventory Project does not allow issues to a Project with a different top level Project ID. | 3 - PC_RM_NO_ISS_TOPLVL_PROJ - The raw material inventory Project does not allow issues to a Project with a different top level Project ID. |

Integration of Schedule Status from Costpoint to Open Plan

- Can be done one file at a time or in the multi project
- Can be done daily/weekly
- Can be done manually via OPP General Import or using OP Batch
- Data comes from a Cognos report from Costpoint

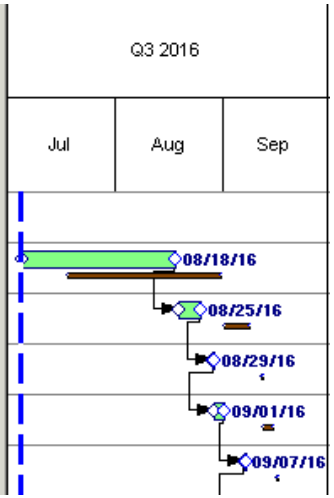


Integration of Schedule Status from Costpoint to Open Plan

- Enables Open Plan to be statused based on Actual Start/Actual Finish/Expected Finish data from the shop floor
- Programs then have an accurate reflection of schedule status that enables critical path analysis

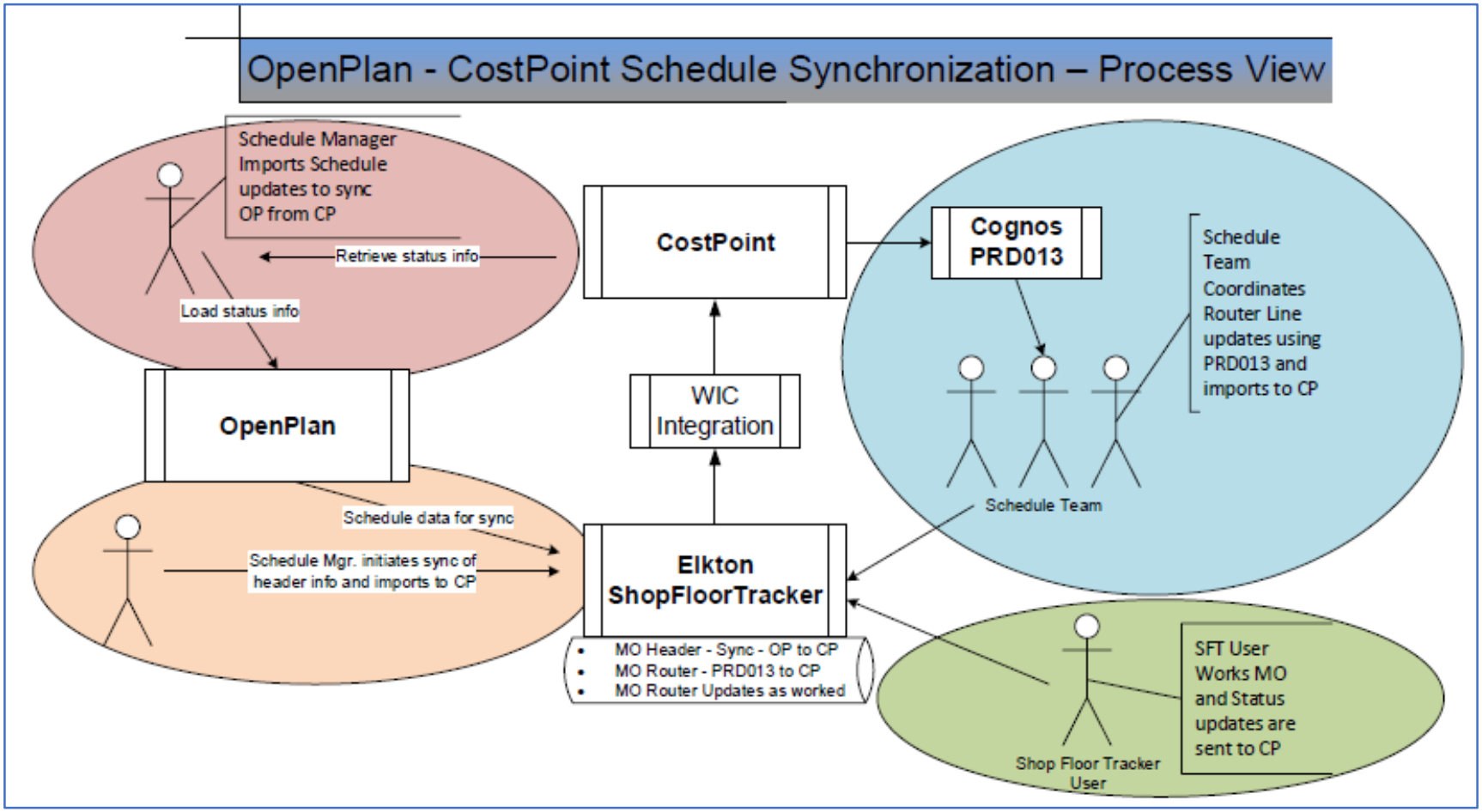
M1 Perform M&IR 99548405Washcoat Washcoat Lined Aft_Barrier Insulators

Activity ID	Activity Desc.	Critical Path Number (UCF 10)	Physical % Complete	DUR	Early Start	Early Finish	Total Float
- 01			0.00		07/05/16	12/12/16	
E2266.4.10.10.10.50.2	Propellant Characterization P2	01	0.00	30d	07/05/16	08/18/16	8d
E2266.4.10.10.10.110.1.1	M1 Perform M&IR 99548404ABRADE	01	0.00	5d	08/19/16	08/25/16	8d
E2266.4.10.10.10.110.1.2	M1 Perform M&IR TLH332A	01	0.00	0.50d	08/29/16	08/29/16	8d
E2266.4.10.10.10.110.1.3	M1 Perform M&IR 99548404LINE Lined Forward Insulator	01	0.00	3.5d	08/29/16	09/01/16	8d
E2266.4.10.10.10.110.1.4	M1 Perform M&IR H3518A or B8	01	0.00	0.30d	09/07/16	09/07/16	6d



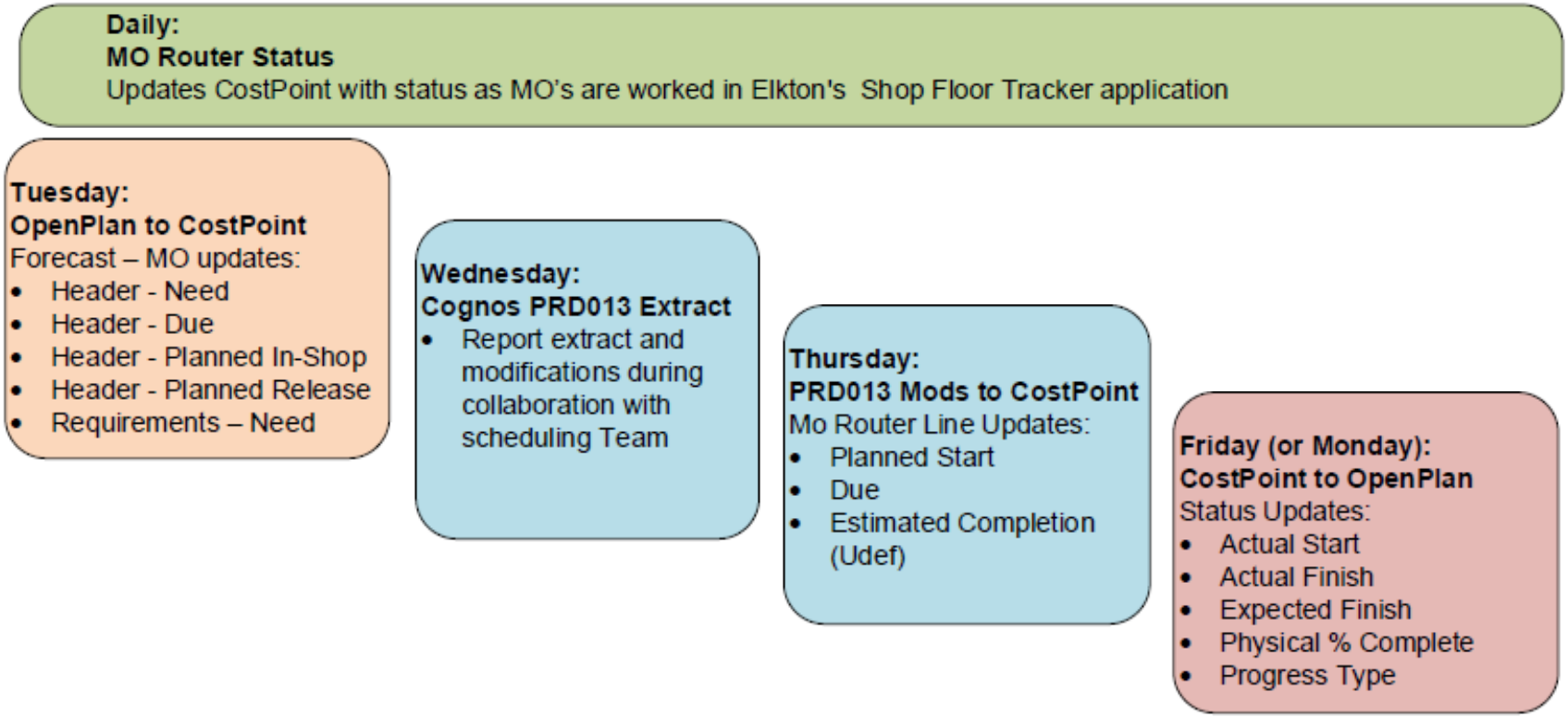
Maintaining Data Alignment

- Define realistic cadence



Maintain Data Alignment

- Establish and communicate integration data requirements and expectations

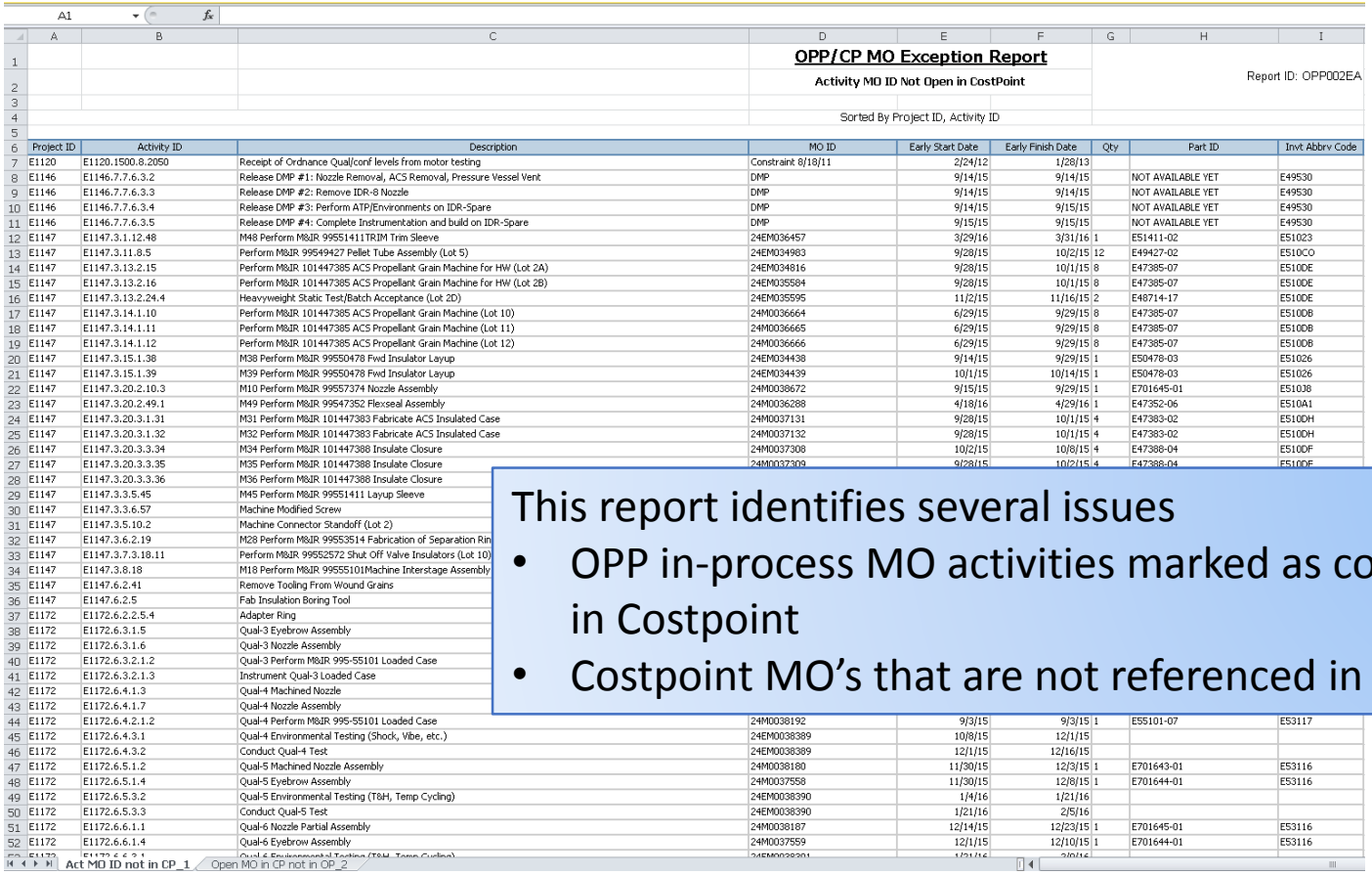


Exception Reporting & Metrics (To Validate Integration)

- Should be a part of the overall process
- Data generated must be actionable
- Ensures that the process is working
- Identifies issues and data inconsistencies
  - Before issues become significant problems
  - Data can be “cleaned up” proactively
- Can identify additional training or documentation requirements

Exception Reporting & Metrics (To Validate Integration)

- Cognos Reports are used for exception reporting



OPP/CP MO Exception Report

Activity MO ID Not Open in CostPoint

Report ID: OPP002EA

Sorted By Project ID, Activity ID

Project ID	Activity ID	Description	MO ID	Early Start Date	Early Finish Date	Qty	Part ID	Invt Abbrv Code
E1120	E1120.1500.8.2050	Receipt of Ordnance Qual/conf levels from motor testing	Constraint 8/18/11	2/24/12	1/28/13			
E1146	E1146.7.7.6.3.2	Release DMP #1: Nozzle Removal, ACS Removal, Pressure Vessel Vent	DMP	9/14/15	9/14/15		NOT AVAILABLE YET	E49530
E1146	E1146.7.7.6.3.3	Release DMP #2: Remove IDR-8 Nozzle	DMP	9/14/15	9/14/15		NOT AVAILABLE YET	E49530
E1146	E1146.7.7.6.3.4	Release DMP #3: Perform ATP/Environments on IDR-Spare	DMP	9/14/15	9/15/15		NOT AVAILABLE YET	E49530
E1146	E1146.7.7.6.3.5	Release DMP #4: Complete Instrumentation and build on IDR-Spare	DMP	9/15/15	9/15/15		NOT AVAILABLE YET	E49530
E1147	E1147.3.1.12.48	M48 Perform M&IR 99551411TRIM Trim Sleeve	24EM036457	3/29/16	3/31/16	1	E51411-02	E51023
E1147	E1147.3.11.8.5	Perform M&IR 99549427 Pellet Tube Assembly (Lot 5)	24EM034983	9/28/15	10/2/15	12	E49427-02	E510CO
E1147	E1147.3.13.2.15	Perform M&IR 101447385 ACS Propellant Grain Machine for HW (Lot 2A)	24EM034816	9/28/15	10/1/15	8	E47385-07	E510DE
E1147	E1147.3.13.2.16	Perform M&IR 101447385 ACS Propellant Grain Machine for HW (Lot 2B)	24EM035584	9/28/15	10/1/15	8	E47385-07	E510DE
E1147	E1147.3.13.2.24.4	Heavyweight Static Test/Batch Acceptance (Lot 2D)	24EM035595	11/2/15	11/16/15	2	E48714-17	E510DE
E1147	E1147.3.14.1.10	Perform M&IR 101447385 ACS Propellant Grain Machine (Lot 10)	24M0036664	6/29/15	9/29/15	8	E47385-07	E510DB
E1147	E1147.3.14.1.11	Perform M&IR 101447385 ACS Propellant Grain Machine (Lot 11)	24M0036665	6/29/15	9/29/15	8	E47385-07	E510DB
E1147	E1147.3.14.1.12	Perform M&IR 101447385 ACS Propellant Grain Machine (Lot 12)	24M0036666	6/29/15	9/29/15	8	E47385-07	E510DB
E1147	E1147.3.15.1.38	M38 Perform M&IR 99550478 Fwd Insulator Layup	24EM034438	9/14/15	9/29/15	1	E50478-03	E51026
E1147	E1147.3.15.1.39	M39 Perform M&IR 99550478 Fwd Insulator Layup	24EM034439	10/1/15	10/14/15	1	E50478-03	E51026
E1147	E1147.3.20.2.10.3	M10 Perform M&IR 99557374 Nozzle Assembly	24M0038672	9/15/15	9/29/15	1	E701645-01	E51038
E1147	E1147.3.20.2.49.1	M49 Perform M&IR 99547352 Flexseal Assembly	24M0036288	4/18/16	4/29/16	1	E47352-06	E510A1
E1147	E1147.3.20.3.1.31	M31 Perform M&IR 101447383 Fabricate ACS Insulated Case	24M0037131	9/28/15	10/1/15	4	E47383-02	E510DH
E1147	E1147.3.20.3.1.32	M32 Perform M&IR 101447383 Fabricate ACS Insulated Case	24M0037132	9/28/15	10/1/15	4	E47383-02	E510DH
E1147	E1147.3.20.3.3.34	M34 Perform M&IR 101447388 Insulate Closure	24M0037308	10/2/15	10/8/15	4	E47388-04	E510DF
E1147	E1147.3.20.3.3.35	M35 Perform M&IR 101447388 Insulate Closure	24M0037309	9/28/15	10/2/15	4	E47388-04	E510DF
E1147	E1147.3.20.3.3.36	M36 Perform M&IR 101447388 Insulate Closure						
E1147	E1147.3.3.5.45	M45 Perform M&IR 99551411 Layup Sleeve						
E1147	E1147.3.3.6.57	Machine Modified Screw						
E1147	E1147.3.5.10.2	Machine Connector Standoff (Lot 2)						
E1147	E1147.3.6.2.19	M28 Perform M&IR 99553514 Fabrication of Separation Rin						
E1147	E1147.3.7.3.18.11	Perform M&IR 99552572 Shut Off Valve Insulators (Lot 10)						
E1147	E1147.3.8.18	M18 Perform M&IR 99555101Machine Interstage Assembly						
E1147	E1147.6.2.41	Remove Tooling From Wound Grains						
E1147	E1147.6.2.5	Fab Insulation Boring Tool						
E1172	E1172.6.2.2.5.4	Adapter Ring						
E1172	E1172.6.3.1.5	Qual-3 Eyebrow Assembly						
E1172	E1172.6.3.1.6	Qual-3 Nozzle Assembly						
E1172	E1172.6.3.2.1.2	Qual-3 Perform M&IR 995-55101 Loaded Case						
E1172	E1172.6.3.2.1.3	Instrument Qual-3 Loaded Case						
E1172	E1172.6.4.1.3	Qual-4 Machined Nozzle						
E1172	E1172.6.4.1.7	Qual-4 Nozzle Assembly						
E1172	E1172.6.4.2.1.2	Qual-4 Perform M&IR 995-55101 Loaded Case	24M0038192	9/3/15	9/3/15	1	E55101-07	E53117
E1172	E1172.6.4.3.1	Qual-4 Environmental Testing (Shock, Vibe, etc.)	24EM0038389	10/8/15	12/1/15			
E1172	E1172.6.4.3.2	Conduct Qual-4 Test	24EM0038389	12/1/15	12/16/15			
E1172	E1172.6.5.1.2	Qual-5 Machined Nozzle Assembly	24M0038180	11/30/15	12/3/15	1	E701643-01	E53116
E1172	E1172.6.5.1.4	Qual-5 Eyebrow Assembly	24M0037558	11/30/15	12/8/15	1	E701644-01	E53116
E1172	E1172.6.5.3.2	Qual-5 Environmental Testing (T&H, Temp Cycling)	24EM0038390	1/4/16	1/21/16			
E1172	E1172.6.5.3.3	Conduct Qual-5 Test	24EM0038390	1/21/16	2/5/16			
E1172	E1172.6.6.1.1	Qual-6 Nozzle Partial Assembly	24M0038187	12/14/15	12/23/15	1	E701645-01	E53116
E1172	E1172.6.6.1.4	Qual-6 Eyebrow Assembly	24M0037559	12/1/15	12/10/15	1	E701644-01	E53116

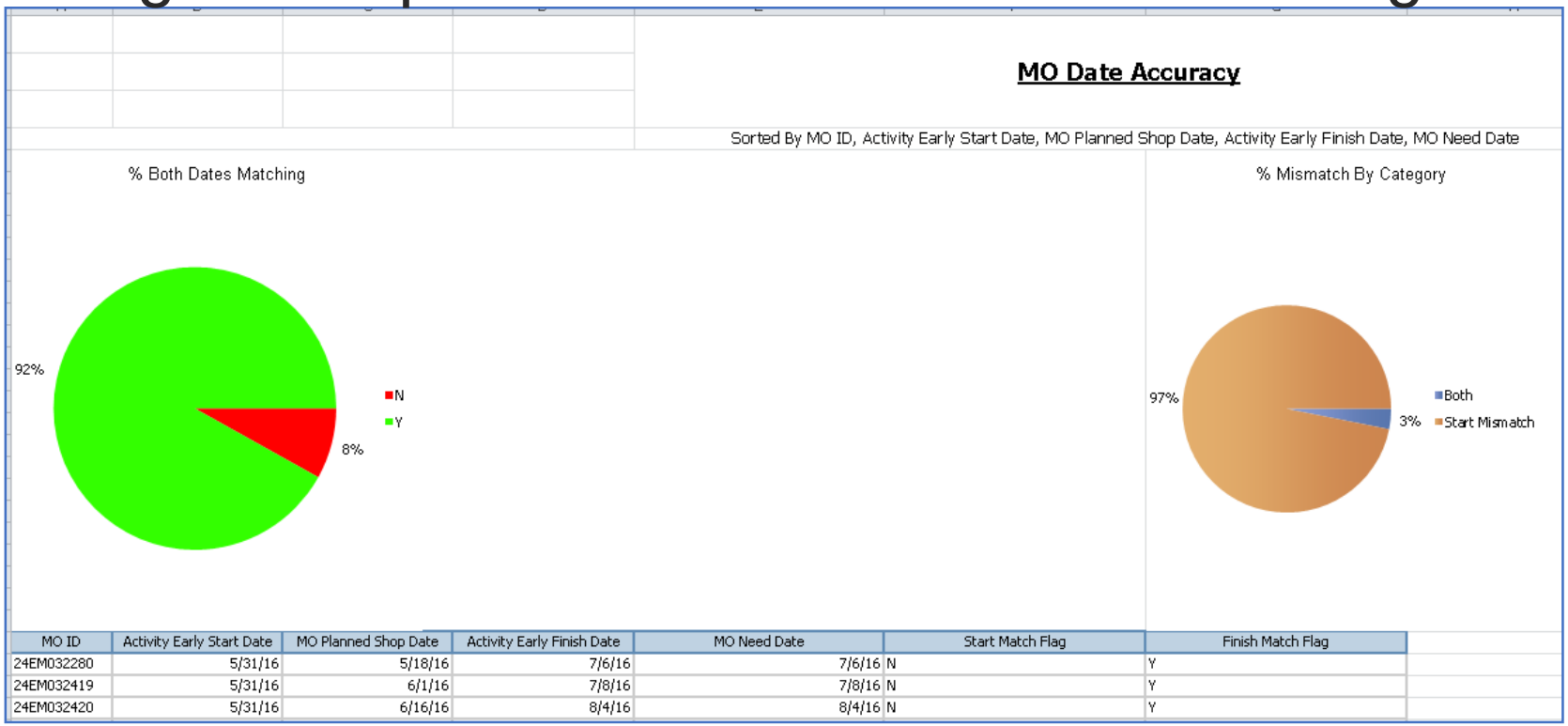
Act MO ID not in CP_1 | Open MO in CP not in OP_2

This report identifies several issues

- OPP in-process MO activities marked as complete in Costpoint
- Costpoint MO's that are not referenced in OPP

Exception Reporting & Metrics (To Validate Integration)

- Cognos Reports are used for metric tracking



MO Date Accuracy

Sorted By MO ID, Activity Early Start Date, MO Planned Shop Date, Activity Early Finish Date, MO Need Date

% Both Dates Matching

% Mismatch By Category

MO ID	Activity Early Start Date	MO Planned Shop Date	Activity Early Finish Date	MO Need Date	Start Match Flag	Finish Match Flag
24EM032280	5/31/16	5/18/16	7/6/16	7/6/16	N	Y
24EM032419	5/31/16	6/1/16	7/8/16	7/8/16	N	Y
24EM032420	5/31/16	6/16/16	8/4/16	8/4/16	N	Y

MMAS Requires 95% Schedule Accuracy

Questions