

Scenarios

1. Schedule blend haul to a bin attached to a rig for a job (Has call sheet)

- Existing Rig Board function

2. Schedule blend haul to a job go with crew (Has call sheet)

- Existing Rig Board function

3. Schedule a blend for a job and load to a bin attached to bulk plant awaiting blend test (Has call sheet)

- Need to number silos/bins in Bulk Plant
- Treat Bulk Plant as Rig, the silos and bins can be attached to Bulk Plant
- Need blend database to store the blend information

4. Schedule a haul to transfer pre-blended blend to a bin attached to a rig for a job (Has call sheet)

- Need blend database to store the blend information associated to the call sheet.
- Select bulker (Sanjel or 3rd Party)
- Scenario 1 is one step of Scenario 3 and 4
- Mock S4-1, All blend in test are listed under one second level sub menu, third level sub menu show passed blend as enabled, still testing blend as disabled.
 - Before we have functions to update test status, all blends are enabled. Dispatch manage them manually.

5. Schedule a haul to transfer pre-blended blend to go with crew (Has call sheet)

- Need blend database to store the blend information associated to the call sheet.
- Select bulker (Sanjel or 3rd Party)
- Scenario 2 is one step of Scenario 3 and 5
- Mock S4-1 support this scenario

6. Schedule a blend haul for a project to a storage attached to a rig (No call sheet)

- Need program to provide recipe
- Or blend database is needed for storing recipe
- Combination of Scenario 7 and Scenario 15, mechanism is similar to Scenario 1

7. Schedule a blend and transfer to a bin attached to bulk plant (No call sheet)

- Need to number silos/bins in Bulk Plant
- Treat Bulk Plant as Rig, the silos and bins can be attached to Bulk Plant
- Need program

workaround- 8. Schedule a blend for product sale with customer's recipe and haul to customer's location (Has call sheet)

- Need customer's recipe is entered in program and call sheet is created from the program.
- Select bulker (Sanjel or 3rd Party)
- Free-text loading destination (Location)
- Call Sheet doesn't have a rig, need to create a fake rig for customer. Then the process will be same as job blend haul.
- May need break down to blend and haul two steps

workaround- 9. Schedule a blend for product sale with customer's recipe and load to customer's bulker (Has call sheet)

- Need customer's recipe is entered in program and call sheet is created from the program.
- Free-text destination (Bulker) , add customer bulker as third party bulker
- Call Sheet doesn't have a rig, need to create a fake rig for customer. Then the process will be same as job blend haul.

workaround-10. Schedule a blend for product sale with Sanjel blend recipe and haul to customer's location (Has call sheet)

- Need program and call sheet is created from the program
- Select bulker (Sanjel or 3rd Party),add customer bulker as third party bulker
- Call Sheet doesn't have a rig
- May need break down to blend and haul two steps

workaround-11. Schedule a blend for product sale with Sanjel blend recipe and load to customer's bulker (Has call sheet)

- Need program and call sheet is created from the program
- Free-text loading destination (Bulker)
- Call Sheet doesn't have a rig
- May need break down to blend and haul two steps upon customer request sample testing

workaround-12. Schedule a neat blend for product sale and haul to customer's location (Has call sheet)

- Need program and call sheet is created from the program
- Call Sheet doesn't have a rig
- This may be treated as same as 10, no blending process will be handled by BPAVS

workaround-13. Schedule a neat blend for product sale and load to customer's bulker (Has call sheet)

- Need program and call sheet is created from the program
- Call Sheet doesn't have a rig
- This may be treated as same as 10, no blending process will be handled by BPAVS

Not in scope - 14. Schedule a blend by using a previous blend to modify into a new blend. (Has call sheet, may apply to 1, 2,3,10,11)

- Need blend database to storing the historical blend records also for the returned blend.
- Need blend calculator upgrade

15. Schedule a haul for blended product from one location to another (Bulk Plant storage or Project storage or Rig storage) (No call sheet)

- Need to number silos/bins in Bulk Plant
- Need blend database to storing the historical blend records also for the returned blend.
- Need blend information for the content stored in a bin/silo.
- Same function as Scenario 4, but start points may be different

Not in scope - 16. Schedule a product transfer from one Bulk Plant to another (No call sheet)

- Similar to scenario 15, but for inventory product only.

Not in scope - 17. Return Cement from job into storage attached to bulk plant (Refer to Call Sheet)

- Need to number silos/bins in Bulk Plant
- Current process use original MTS to ship it back, BPO determine the storage and track it on whiteboard or spreadsheet tracker.

Not in scope - 8. Pre-hydrated/Add-On-Fly additives load

- May be multiple load sheets, these additives are loaded once.

Definitions

- Bulk Plant Storage – any storage resides in the Bulk Plant. We need to number them and enter in the system, both eServiceOnline and BPAVS will reference same list of storage.

- Project Storage - remote storage for blended product that is NOT assigned to a rig. I assume most of these storages have bin number. We need to number the rest.
- Rig Storage – storage assigned to a rig. All of these storages have bin number.

Project Goal

- Implement blend schedule process to utilize blend calculator in most of scenarios
- Implement blend haul process for product transfer, product sale and blend quarantine needs

Technical Goal

- Eliminate Call Sheet Export/Import
- Decouple header and service line specific section to achieve more flexible solutions.
- Decouple blend request and shipping request in product haul to achieve more flexible solutions.
- Implement blend database for all blend using in jobs and also interim blends.
- Enhance blend calculator to handle preblended blend modification.
- Managing bulk plant storage in bin information systems.
- Implement storage master database with pod structure

Design Ideas

- Upgrade concept "Rig" to "Operation Site", use same mechanism to process storage relations.
 - Add type to the entity
 - Operation Rig (Cement Jobs, Remedial Jobs)
 - Customer Site (for Product Sale, Project Camp)
 - Bulk Plant (Sanjel Bulk Plant)
 - Show Operation site on RigBoard as single RigJob on the bottom.
 - Schedule product transfer between Bulk Plant
- Upgrade concept Bin and Bulker as storage
 - Implement pod structure
 - Give the pod unique identifier, can be referenced independently.
 - Add pod capacity information.
 - Implement bulk capacity reference
 - Bulk Density calculation
 - Add storage total capacity
 - Implement Storage Content Tracking
 - Implement pod level tracking
 - Overlap with blend database
 - Pop up operation page for storage tracking
- Program back tracing

- Start from Bin attached to rig
 - Schedule same blend for same program
 - Find future program for same client if the bin is empty.
 - Business Gap: Program expected start date and expected rig not updated in system, has sent Jeff and Brett Henry to ask.
- Separate blend and load process
 - Per blend product haul two steps operation, blend and load.
 - Two step can be combined as one
 - Blend and load to bulk plant storage.
 - Haul preblended product from bulk plant storage to job site.

Project Scope

- Eliminate Call Sheet Export/Import
- Eliminate unnecessary validations for non-operation call sheet/job.
- Master data.
 - Storage and cement transfer bulker pod level numbering, include Sanjel Bulk Plant, Project Bulk Plant, Bulker, B-Train, P-Tank, Silos, PIG LBT, etc.
 - Rig. Operation site concept implementation to extend Rig Board to support non-job associated blend and haul.
- Process enforcement
 - Product sale must have a call sheet.
 - Job associated blend must have a call sheet
 - Project associated pre-blend must have a program.
 - Workaround 8-13 by following approach
 - Add fake rig for product sale customer to work through call sheet and Rig Board process.
 - Add customer's bulker as third party bulker crew if needed.
- Scenario 1 - 7, 15