**Technical Design Document**

**(C056 – Fuel Adjustment Journal)- Wet Stock Management**



**NGMR Global Solution**

Document Information

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Document Review and Sign-off

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| --- | --- | --- | --- |
| Name | Role | Action | Date Reviewed |
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# Document Summary

## General info

|  |  |
| --- | --- |
| **Technology** | *Dynamics 365 Commerce, HOS, BOS* |
| **Application version** | *10.0.15 (10.0.644.10015)* |
| **Platform version** | *Update 39 (7.0.5816.35651)* |

## Purpose and Intended Audience of This Document

This document outlines desired changes to functionality in Dynamics 365 (D365) as required by Client Business users for Fuel Adjustment Journal. These changes are necessary to fulfill requirements previously noted. Avanade’s solution developers will document all technical specifications for this design.

## Solution Overview

Describe solution overview

### Current business process

### Rationale for customization

Customization need to be performed to create a new Fuel Adjustment Journal and other customizations in related areas in D365 F&O.

## Terminology and abbreviations

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | | |  |  | | --- | --- | | D365 F&O |  | |  |  | |  |  | | Dynamics 365 for Finance and Operations | | POS | Point of Sale | | NGMR | Next Gen Mobility Retail | |  |
|  |  |
|  |  |

# Design Considerations

## Key Technical Decisions

## Assumptions and Dependencies

### Assumptions

### Dependencies

## Updates to UI

### Menu items < ***NGMRFuelAdjustmentCreateJournal*** >

|  |  |
| --- | --- |
| **Type** | *Display* |
| **Name** | *NGMRFuelAdjustmentCreateJournal* |
| **Label** | *Fuel Adjustment Create journal* |
| **Object Type** | *Form* |
| **Object** | *NGMRFuelAdjustmentCreateJournal* |
| **Configuration key** | *NGMR* |

### 2.3.2 Menu items < ***NGMRFuelAdjustmentJournal*** >

|  |  |
| --- | --- |
| **Type** | *Display* |
| **Name** | *NGMRFuelAdjustmentJournal* |
| **Label** | *Fuel Adjustment journal* |
| **Object Type** | *Form* |
| **Object** | *NGMRFuelAdjustmentJournal* |
| **Configuration key** | *NGMR* |

## Updates to Data Dictionary

2.4.1 Tables < NGMRFuelAdjustmentlines >

|  |  |
| --- | --- |
| **Label** | *Fuel Adjustment lines* |
| **Title field(s)** | *JournalNum, LineNum* |
| **Cache lookup** | *None* |
| **Table group** | *WorkSheetLine* |
| **Replacement key** | *NA* |
| **Configuration key** | *NGMR* |
| **Primary index** | *JournalIdx* |
| **Table Type** | *Regular* |

#### Fields

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Name** | **Type** | **Extended Data Type** | **Allow edit** | **Allow edit on create** | **Mandatory** |
| *JournalNum* | *String* | *NGMRFuelDeliveryJournalNum* | *Yes* | *Yes* | *Yes* |
| *JournalType* | *String* | *NGMRWetStockJournalType* | *Yes* | *Yes* | *Yes* |
| *BusinessDate* | *Date* | *NGMRBusinessDate* | *Yes* | *Yes* | *No* |
| *Site* | *String* | *NGMRRetailStoreId* | *Yes* | *Yes* | *Yes* |
| *AdjustmentDate* | *Date* | *TransDate* | *Yes* | *Yes* | *No* |
| *TankId* | *String* | *NGMRTankId* | *Yes* | *Yes* | *No* |
| *FuelTypeId* | *String* | *NGMRFuelTypeId* | *Yes* | *Yes* | *No* |
| *FuelItemDescription* | *String* | *Name* | *Yes* | *Yes* | *No* |
| *FuelVolume* | *Real* | *NGMRFuelVolume* | *Yes* | *Yes* | *No* |
| *Capacity* | *Real* | *NGMRCapacity* | *NO* | *NO* | *NO* |
| *ReasonCode* | *String* | *NGMRReasonCode* | *NO* | *NO* | *YES* |
| *LineNum* | *Real* | *LineNum* | *NO* | *NO* | *Yes* |

#### Fields group(s)

|  |  |  |
| --- | --- | --- |
| **Name** | **Label** | **Field(s)** |
| *Auto idendification* | *Inentification* | JournalNum  Line Num |

#### Index

|  |  |  |  |
| --- | --- | --- | --- |
| **Name** | **Allow duplicates** | **Alternate key** | **Field(s)** |
| *JournalIdx* | *Yes* |  | *JournalNum LineNum* |

#### Methods

|  |  |
| --- | --- |
| **Name** | **Signature / method description** |
| LastLineNum | public static LineNum lastLineNum(NGMRFuelDeliveryJournalNum \_journalId)  {  return (select maxof(LineNum) from NGMRFuelAdjustmentlines  where NGMRFuelAdjustmentlines.JournalNum == \_journalId).LineNum;  } |
| Insert | public void insert()  {  if (!this.LineNum)  {  this.LineNum = NGMRFuelAdjustmentlines::lastLineNum(this.JournalNum) + 1;  }  super();  } |
| ValidateWrite | public boolean validateWrite()  {  boolean ret;    ret = super();  if(this.Capacity < abs(this.FuelVolume))  {  throw error("@NGMR:NGMRTankCapacityValidation");  }  return ret;  } |

## Menu<Retail & Commerce >

Retail & Commerce

|  |  |
| --- | --- |
| **Name** | *RetailMain.NGMRExtension* |

## Business Process & Workflow

Overview of Workflow.

## Updates to Business logic and batch jobs

Business logic

### Class < NGMRWetStockJournalController>

|  |  |
| --- | --- |
| Title | Description |
| Class Name | NGMRWetStockJournalController |
| Class Description/ Purpose | *Controller will allow the user the manipulate the input data* |
| Object Type | *Class* |
| Base Class | SysOperationServiceController |
| Interfaces Implemented | *NotApplicable* |
| Methods | *Main,construct* |
| Events | *Events (if applicable)* |

### Class < NGMRWetStockJournalService>

|  |  |
| --- | --- |
| Title | Description |
| Class Name | NGMRWetStockJournalService |
| Class Description/ Purpose | *Service class is to perform operation* |
| Object Type | *Class* |
| Base Class | SysOperationServiceBase |
| Interfaces Implemented | *NotApplicable* |
| Methods | *checkJournal,* |
| Events | *Events (if applicable)* |

### Class <NGMRWetStockReconciliationContract>

### Class <NGMRWetStockReconciliationController>

## Label Files <New Label File Name>

|  |  |
| --- | --- |
| **Name** | *NGMR* |
| **Language** | *en-US* |
| **Label FileId** |  |

## Security and Configuration Design

### Overview

Describe high level the security and configurations options that apply to this extension.

# Packaging and Deployment

## Overview

Describe how this extension will be built and packaged.If possible, attach a packaging and deployment process document.

# Unit Test Cases

Design the unit tests that will be used to validate the development design and integrity of the interface based on the description from the detail design.



# Estimates

Provide effort estimate for this requirement.

|  |  |
| --- | --- |
| **Task** | **Effort Estimate (Hrs.)** |
| Data Modeling |  |
| UI changes |  |
| Business logic |  |
| Unit Testing |  |
| Total |  |

# Issues / Open Items

This section lists the open issues at the time this detailed technical design document was created.

# Appendices

## Full Database Schema

Create link