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SAP Agricultural Contract Management

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Content

1 SAP Agricultural Contract Management

Product Information

Product	SAP Agricultural Contract Management
Release	3.0
Based On	SAP enhancement package 7 for SAP ERP 6.0
Last Documentation Update	December 2016 (Support Package 02)

Use

The trading of agricultural commodities, such as wheat, corn, soybeans, and coffee, is a niche business that has highly specific requirements. Commodity traders can have relationships with many counterparties and maintain several contracts with each one. The terms and pricing data in an agricultural commodity contract can be highly complex and include pricing adjustments based on quality factors. In addition, the contract execution can involve both planned and unplanned deliveries, which must be recorded and assigned to one or more contracts. Finally, the contract settlement process must handle prepayments, reassignments, quality-based pricing, tolerances, and optionalities. *SAP Agricultural Contract Management* enables commodity traders to capture and manage these complex commodity contracts. It is an end-to-end solution that supports the full contract life-cycle, including the capture of the contract terms, the logistical processing, and the final settlement and closure.

SAP Agricultural Contract Management supports the following commodity contract scenarios:

- Third Party Purchase
- Third Party Sale
- Intercompany
- Intracompany
- Back-to-Back
- Spot Purchase
- Commingled Stock
- Washout (including the Circle variation)

Integration

SAP Agricultural Contract Management is an addon for SAP ERP. A minimum release of SAP ERP 6.0 enhancement package 6 is required. SAP Global Trade Management and SAP Trader's and Scheduler's

Workbench must be active. *SAP Agricultural Contract Management* is also fully integrated with SAP Financial Accounting.

Optionally, *SAP Agricultural Contract Management* can be integrated with a third party trading system via an SAP NetWeaver Process Integration (SAP PI) system. In this implementation scenario, contract data is captured through the third party trading system and then flows into *SAP Agricultural Contract Management*. Then, any changes made to the contract data or contract master data in *SAP Agricultural Contract Management* are communicated back to the third party trading system.

For more information about PI content that is supported with *SAP Agricultural Contract Management*, see .

The following figure illustrates the technical architecture of *SAP Agricultural Contract Management*:
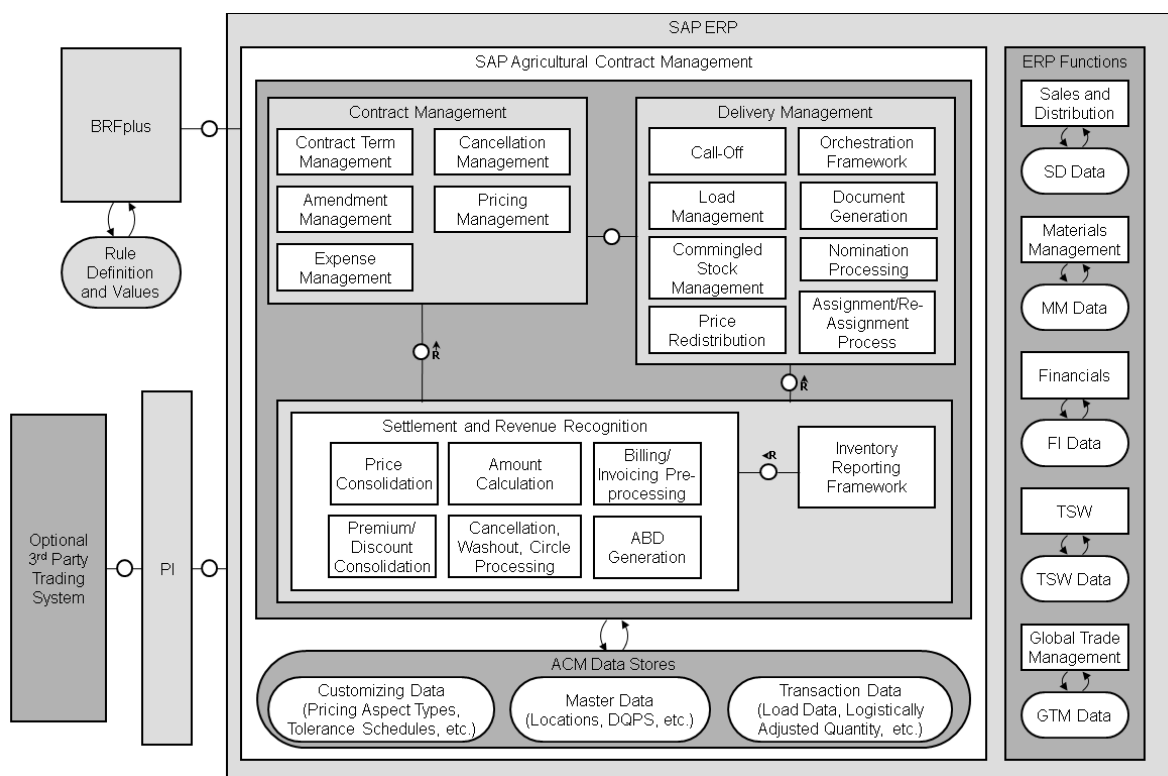
Technical Architecture Model for SAP Agricultural Contract Management

Features

Contract Capture and Maintenance

You can capture all of the complex terms and conditions that govern the fulfillment of a commodity contract directly in *SAP Agricultural Contract Management*. However, before you can begin to capture commodity contracts, you must configure certain contract master data. For more information, see Master Data [page 22]. For more information about capturing contracts in *SAP Agricultural Contract Management*, see Contract Capture and Maintenance [page 45].

Commodity Pricing Engine

You can use this feature to retrieve pricing formulas in business documents and evaluate them to calculate final prices for commodities. The resulting price is then transferred to the condition types that are used in commodity pricing. You can use the system to capture basis and futures price components. You can also enter additional pricing data at commodity item level and at CPE level. The system also enables you to enter

provisional prices that can later be overridden when the contract is finally settled. For more information, see Commodity Pricing Engine [page 63].

Expense Management

You can use the system to manage the costs associated with a commodity contract. For more information, see Expense Management [page 81].

Call-Off

During the execution of a contract, you can call-off a quantity of the contract by raising a purchase order or a sales order to link a delivery to a specific contract. For more information, see Call-Offs [page 92].

Load Data Capture

You can use the system to capture the details of delivered loads, including weights, volumes, and quality characteristics. The system then uses these details during the contract application and contract settlement processes. For more information, see Load Data Capture [page 97].

Contract Application

You can use the contract application features to validate a delivered load and assign it to the appropriate commodity contract. For more information, see Contract Application [page 119].

Contract Settlement

During the execution of a contract, you can financially settle various quantities with the contract counterparty, for example, moved quantities, washout quantities, and canceled quantities. For more information, see Contract Settlement [page 165].

Inventory True-Up

You can use the system to calculate the value of the firm's inventory. The inventory trueup process takes account of both contract related inventory changes and non-contract related inventory changes such as shrinkage. For more information, see Inventory True-Up [page 217].

Exposure Management

You can use the system to manage the risks and exposures that the various products may face due to several unforeseen circumstances. Various types of exposures are created at different points of the lifecyle of the contract. for more information, see Exposure Management [page 71].

Possible Third Party Integration

Agricultural commodity management may require sophisticated risk analytics, portfolio management, and granular relationships with financial instruments. To support these additional requirements, *SAP Agricultural Contract Management* can be integrated with a third party trading system. For more information, see Possible Third Party Integration [page 220].

Country-Specific Features

The solution provides additional features that are designed to meet country-specific requirements for agricultural commodity contracts. For more information, see Country-Specific Features [page 230].

2 Changes and New Features in SAP Agricultural Contract Management 3.0

Use

This section of SAP Library provides an overview of changes and new features that have been introduced in *SAP Agricultural Contract Management 3.0* since SAP Agricultural Contract Management 2.0 or that have been made available with a Support Package for SAP Agricultural Contract Management 3.0

More Information

2.1 Changes and New Features per Support Package

Support Package 02

Change	More Information
A new feature which enables user to define the dependency of one characteristic on another characteristic in the Discount Premium Quality Schedules (DPQS) calculation by changing the characteristics definition at the value schedule and evaluation process within the settlement.	Example: Conditional DPQS [page 36]
A new business add-in (BAdI) which enables user to define customer-specific quantities for ACM-related exposures.	Net Dry [page 79]

Support Package 01

Change	More Information
A new calculation rule created as a global derived characteristic for the Discount Premium Quality Schedules (DPQS) calculation in which the net adjusted application value is calculated based on the Duval formula	Creating Global Derived Characteristics [page 26] Example: Duval Calculation [page 27]
A new calculation rule for volume schedule of the Discount Premium Quality Schedules (DPQS) calculation in which characteristics are specified and used as base net	Creating Volume Schedules [page 29] Example: Base Net Calculation [page 31]
Enhancement of Orchestration Framework Automation to adjust by adding or removing quantities from Stock In Transit when the Load and Unload quantities mismatch	Orchestration Framework Automation [page 111]
A new business rule to allow the specification of application instructions to be applied when there is extra quantity in the Load Data Capture (LDC)	Alternative Application Processing Option [page 122]
A new Application Instruction to combine the steps to create Load Data Capture (LDC) for a Sales scenario followed by Spot Purchase and Accumulate to Own scenario	In Store Sales and Purchase [page 139]
A new report to view various details of an application document	Creating Storage History Report [page 163]
A new method of posting the invoice document that enables advance payment to vendors without affecting the GR/IR and Purchase Price Variance (PPV) accounts.	Provisional Settlements [page 202]
A new functionality to facilitate negotiations during Settlements where the Source and Target Currencies are different.	FX Overview [page 171]

2.2   What's New: Master Data

This section of SAP Library provides an overview of changes and new features that have been introduced in *SAP Agricultural Contract Management 3.0* since *SAP Agricultural Contract Management 2.0* or with a Support Package for *SAP Agricultural Contract Management 3.0*. The following table provides an overview of new, enhanced, and removed functions that are related to Master Data.

Function	Type of Change	Required Support Package (SP)	Description	More Information
A feature to define the dependency of one characteristic on another characteristic in the Discount Premium Quality Schedules (DPQS) calculation	Enhanced	SP01 **i Note** Added in this document for SP02.	You can define the dependency by changing the characteristics definition at the value schedule and evaluation process in the settlement.	Creating Value Schedules [page 34] Example: Conditional DPQS [page 36]
Duval calculation rule as a global derived characteristic for Discount Premium Quality Schedules (DPQS)	Enhanced	SP01	You can calculate the net adjusted value based on the Duval formula.	Creating Global Derived Characteristics [page 26] Example: Duval Calculation [page 27]
Base net calculation rule for volume schedule of Discount Premium Quality Schedules (DPQS)	Enhanced	SP01	You can use the base net rule for volume schedule of the DPQS calculation.	Creating Volume Schedules [page 29] Example: Base Net Calculation [page 31]

For a complete list of changed and new features, see Changes and New Features in SAP Agricultural Contract Management [page 9]

2.3 What's New: Contract Application

This section of SAP Library provides an overview of changes and new features that have been introduced in *SAP Agricultural Contract Management 3.0* since *SAP Agricultural Contract Management 2.0* or with a Support Package for *SAP Agricultural Contract Management 3.0*. The following table provides an overview of new, enhanced, and removed functions that are related to Contract Application.

Function	Type of Change	Required Support Package (SP)	Description	More Information
Application documents	New		You can now generate new types of application documents.	Application Document [page 120]

Function	Type of Change	Required Support Package (SP)	Description	More Information
Generating spot contracts for PAD and CAD	New		You can now generate a Spot Contract for a Purchase Application Document or Commingled Application Document.	Spot Contracts [page 131]
PAD or CAD spot reversal	New		You can now reverse the spot contract process of a PAD or CAD.	PAD and CAD Spot Reversal [page 139]
Alternative Application Processing Option	New	SP01	You can apply an alternative application instruction when there is extra quantity in the Load Data Capture (LDC).	Alternative Application Processing Option [page 122]
In Store Sales	New	SP01	A new Application Instruction to combine the steps to create Load Data Capture (LDC) for a Sales scenario followed by Spot Purchase and Accumulate to Own scenario	In Store Sales and Purchase [page 139]
Storage History Reports	New	SP01	A new report to view various details of an application document	Creating Storage History Report [page 163]

For a complete list of changed and new features, see Changes and New Features in SAP Agricultural Contract Management [page 9]

2.4 What's New: Load Out Match

This section of SAP Library provides an overview of changes and new features that have been introduced in *SAP Agricultural Contract Management 3.0* since *SAP Agricultural Contract Management 2.0* or with a Support Package for *SAP Agricultural Contract Management 3.0*. The following table provides an overview of new, enhanced, and removed functions that are related to Load Out Match.

Function	Type of Change	Description	More Information
Load out match	New	You can now load out commodities using the Load Out process.	Load Out Match [page 158]
Creating load out application documents	New	You can now create load out application documents.	Creating Load Out Application Documents [page 159]
Matching load out application documents	New	You can now match load out application documents with stored goods application documents.	Matching Load Out Application Documents [page 161]

For a complete list of changed and new features, see Changes and New Features in SAP Agricultural Contract Management [page 9]

2.5 What's New: Manual Application Workcenter

This section of SAP Library provides an overview of changes and new features that have been introduced in *SAP Agricultural Contract Management 3.0* since *SAP Agricultural Contract Management 2.0* or with a Support Package for *SAP Agricultural Contract Management 3.0*. The following table provides an overview of new, enhanced, and removed functions that are related to Manual Application Workcenter.

Function	Type of Change	Description	More Information
LDC event date	New	When creating LDC objects, you can now specify an LDC event date.	Creating LDC Objects (Direct Entry for Planned Contracts) [page 100] Creating LDC Objects (Mass Maintenance for Planned Contracts) [page 102]
Displaying application documents	Enhanced	You can now choose a default unit of measure for contract application documents. You can search for application documents using the original application instruction and switch between trade, base of contract, and unit of measure when viewing contract application data.	Displaying Application Documents [page 143]

For a complete list of changed and new features, see Changes and New Features in SAP Agricultural Contract Management [page 9].

2.6 What's New: Orchestration Framework Automation

This section of SAP Library provides an overview of changes and new features that have been introduced in *SAP Agricultural Contract Management 3.0* since *SAP Agricultural Contract Management 2.0* or with a Support Package for *SAP Agricultural Contract Management 3.0*. The following table provides an overview of new, enhanced, and removed functions that are related to Orchestration Framework Automation.

Function	Type of Change	Required Support Package (SP)	Description	More Information
Orchestration frame-work automation	New		You can now automati-cally cancel OF docu-ments generated dur-ing Load Data Capture process	Orchestration Frame-work Automation [page 111]
Stock in Transit	Enhanced	SP01	Enhancement of Or-chestration Framework Automation to adjust by adding or removing quantities from Stock In Transit when the Load and Unload quan-tities mismatch	Orchestration Frame-work Automation [page 111]

For a complete list of changed and new features, see Changes and New Features in SAP Agricultural Contract Management [page 9]

2.7 What's New: Storage

This section of SAP Library provides an overview of changes and new features that have been introduced in *SAP Agricultural Contract Management 3.0* since *SAP Agricultural Contract Management 2.0* or with a Support Package for *SAP Agricultural Contract Management 3.0*. The following table provides an overview of new, enhanced, and removed functions that are related to Storage.

Function	Type of Change	Description	More Information
Storage fees	New	You can now assign specific pricing conditions to storage agreements.	Storage Fees [page 211]
Storage agreements	New	You can now define the terms and conditions under which goods are stored.	Storage Agreements [page 59]

Function	Type of Change	Description	More Information
Handling of stored goods	New	You can now perform a set of activities to receive goods for storage or to move goods between different storage agreements	Handling of Stored Goods [page 157]
Storage settlement	New	You can now settle the 3rd party goods in storage at a plant.	Storage Settlement [page 210]

For a complete list of changed and new features, see Changes and New Features in SAP Agricultural Contract Management [page 9].

2.8 What's New: Vendor Split

This section of SAP Library provides an overview of changes and new features that have been introduced in *SAP Agricultural Contract Management 3.0* since *SAP Agricultural Contract Management 2.0* or with a Support Package for *SAP Agricultural Contract Management 3.0*. The following table provides an overview of new, enhanced, and removed functions that are related to Vendor Split.

Function	Type of Change	Description	More Information
Collating the vendor split	New	You can now reverse the vendor split.	Collating Vendor Split [page 128]
Selecting the type of vendor split	Enhanced	When creating an event in the LDC, you can now select which type of vendor split you want to use. You can also choose to block the default split profile.	Load Data Capture: Vendor Split [page 105]
Splitting vendor ownership	Enhanced	You can now split vendor ownership for purchase application documents.	Splitting Vendor Ownership [page 153]

For a complete list of changed and new features, see Changes and New Features in SAP Agricultural Contract Management [page 9].

2.9 What's New: Warehouse Receipts

This section of SAP Library provides an overview of changes and new features that have been introduced in *SAP Agricultural Contract Management 3.0* since *SAP Agricultural Contract Management 2.0* or with a Support Package for *SAP Agricultural Contract Management 3.0*. The following table provides an overview of new, enhanced, and removed functions that are related to Warehouse Receipts.

Function	Type of Change	Description	More Information
Processing warehouse receipts	New	You can now create new receipts, change vendor and quantity, and cancel receipts.	Processing Warehouse Receipts [page 149]

For a complete list of changed and new features, see Changes and New Features in SAP Agricultural Contract Management [page 9]

2.10 What's New: Contract Settlement

This section of SAP Library provides an overview of changes and new features that have been introduced in *SAP Agricultural Contract Management 3.0* since *SAP Agricultural Contract Management 2.0* or with a Support Package for *SAP Agricultural Contract Management 3.0*. The following table provides an overview of new, enhanced, and removed functions that are related to Contract Settlement.

Function	Type of Change	Required Support Package (SP)	Description	More Information
Provisional Settlement	New	SP01	Provisional Settlements provide the ability to post the invoice document with or without affecting the GR/IR and Purchase Price Variance (PPV) accounts.	Provisional Settlements [page 202]
FX Functionality in International Settlements	Enhanced	SP01	FX functionality provides the ability to perform negotiations during Settlements in cases where the Source and Target Currencies are different.	FX Overview [page 171]

For a complete list of changed and new features, see Changes and New Features in SAP Agricultural Contract Management [page 9]

2.11   Country-Specific Features for Brazil

This section of SAP Library provides an overview of changes and new features that have been introduced in *SAP Agricultural Contract Management 2.0* since *SAP Agricultural Contract Management 1.0* or with a Support Package for *SAP Agricultural Contract Management 2.0*. The following table provides an overview of new, enhanced, and removed functions that are related to the country-specific features for Brazil.

Function	Type of Change	Required Support Package (SP)	Description	More Information
Integration of risk exposure function with Brazil-specific Application True-Up scenario	New	SP01	When executing an application true-up scenario, returning or receiving quantities to the vendor, the exposures for stock and stock correction are updated.	Application and Settlement True-Up [page 239]
Integration of risk exposure function with Brazil-specific Future Delivery scenario	New	SP01	When executing the future delivery scenario, the relevant exposures (stock, application, and contract) are updated.	Future Delivery [page 255]
Integration of risk exposure function with Brazil-specific Triangular Operation scenario	New	SP01	When executing the triangular operation scenario, the relevant exposures (stock, application, and contract) are updated.	Triangular Operation [page 257]

2.12   Integration with SAP Commodity Management

This section of SAP Library provides an overview of changes and new features that have been introduced in *SAP Agricultural Contract Management 2.0* since *SAP Agricultural Contract Management 1.0*. The following table provides an overview of new, enhanced, and removed functions that are related to the integration with SAP Commodity Management.

Function	Type of Change	Description	More Information
Integration with SAP Commodity Management	New	ACM-CM Integration switch is developed. To enable the integration, this one-time switch must be activated.	Integration with SAP Commodity Management [page 63]

2.13 Use of Commodity Pricing Engine

This section of SAP Library provides an overview of changes and new features that have been introduced in *SAP Agricultural Contract Management 2.0* since *SAP Agricultural Contract Management 1.0* or with a Support Package for *SAP Agricultural Contract Management 2.0*. The following table provides an overview of new, enhanced, and removed functions that are related to Commodity Pricing Engine (CPE).

Function	Type of Change	Required Support Package (SP)	Description	More Information
Use of Commodity Pricing Engine (CPE)	New		As a result of ACM-CM integration, the functions from a standard tool CPE can be used for pricing of commodities processed by SAP Agricultural Contract Management. You can fully customize the CPE view.	Commodity Pricing Engine [page 63]
ACM Pricing View	New		As a result of ACM-CM integration, a capability to use an ACM pricing view along with the standard CPE views is now provided.	ACM Pricing View [page 65]
Enablement of pricing approach "Future and Ratio" in ACM Pricing View	Enhanced	SP01	In addition to the existing *Future and Basis* pricing approach, ACM Pricing View is enhanced with *Future and Ratio* option which can be used for pricing of specific commodities such as cocoa powder and condensed milk.	ACM Pricing View [page 65]

Function	Type of Change	Required Support Package (SP)	Description	More Information
Pricing Condition Types	Enhanced		As a result of ACM-CM integration, a compatibility to use ACM pricing condition types in CPE is now provided. The condition types of ACM and CPE can be mapped as a part of the Customizing setting for ACM-CM integration.	Pricing Condition Types [page 66]
Use of provisional pricing in CPE	Enhanced		As a result of ACM-CM integration, provisional pricing function in CPE that retrieves market prices directly can be used for provisional pricing for commodities processed by SAP Agricultural Contract Management.	Provisional Pricing [page 69]
Use of BRFplus for provisional pricing	Removed		BRFplus is no longer used for provisional pricing. Instead, the determination is done by CPE.	Provisional Pricing [page 69]

2.14 Use of Exposure Management Functions

This section of SAP Library provides an overview of changes and new features that have been introduced in *SAP Agricultural Contract Management 2.0* since *SAP Agricultural Contract Management 1.0* or with a Support Package for *SAP Agricultural Contract Management 2.0*. The following table provides an overview of new, enhanced, and removed functions that are related to the Exposure Management functions.

Function	Type of Change	Required Support Package (SP)	Description	More Information
Creation of exposures (automatic mode)	New		As a result of ACM-CM integration, exposures are created automatically during the various ACM scenarios by the system.	Creation of Raw Exposures [page 72] Exposures Lifecycle [page 73]
Creation of exposures (manual mode)	New		A new report *Reconciliation of Exposures* enables the user to reconcile the errors by regenerating the raw exposures manually.	
Monitoring of exposures	New		The standard Treasury Risk Management (TRM) transaction **FTREX_LG1** enables the user to check the details of raw exposures created.	
Monitoring of exposures documents	New		The standard Treasury Risk Management (TRM) transaction **FTREX1** enables the user to check details of a raw exposure document at line item level.	
Usage of Query Monitor	New		The standard BW transaction **RSRT** enables the user to check the raw exposures by entering a query in the Query Monitor.	Risk Reporting [page 74] Running a Risk Report [page 75]
Exposure Relevant flag with negative storage location Customizing for commingled stocks	Enhanced	SP01	A new flag is added with Customizing activity *Maintain Storage Location for Negative Posting*. It indicates if the negative storage location is exposure relevant.	Commingled Loads [page 140]

Function	Type of Change	Required Support Package (SP)	Description	More Information
Net Dry Business Add-In (BAdI)	New	SP01 i Note Added in this document for SP02.	A new BAdI enables the user to define customer-specific quantities for ACM-related exposures.	Net Dry [page 79]

3 Master Data

Before you can capture a commodity contract, you must maintain the master data used to define the contract terms and conditions.

The following master data is maintained in Customizing for *Logistics - General* under ▶️ *Global Trade Management* ❯ *Agricultural Contract Management* ❯ *Basic Settings* ▶️:

- Contract Types (for example, third party purchase, third party sale, intercompany purchase, and so on)
- Quantity Types (for example, consumed quantity, canceled quantity, overfill quantity, and so on)
- Text Assignments
- Modes of Transport and Means of Transport
- Related Trade Types
- Title Transfer Settings
- Process Parallelization Settings
- Currency Mappings
- Cancellation Codes
- Optionality Categories
- Crop Seasons

The following master data is maintained in Customizing for *Logistics - General* under ▶️ *Global Trade Management* ❯ *Agricultural Contract Management* ❯ *Setup for Master Data* ▶️:

- Pricing Aspect Types and Conditions
- Tolerance Types
- Discount Premium Quality Schedule (DPQS) Configuration Data (for example, calculation rules, derived rules, rounding parameters, and so on)

When you have defined your Customizing settings, you must also define the following schedules:

- DPQS
  For more information, see Discount Premium Quality Schedule [page 22].
- Tolerance Schedules
  For more information, see Tolerance Schedule [page 40].

You must also define valuation points. For more information, see Valuation Point [page 44].

3.1 Discount Premium Quality Schedule

Definition

A discount premium quality schedule (DPQS) specifies the quality characteristics to be measured for a commodity, the acceptable values for those characteristics, and any discounts or premiums to be applied. The

DPQS also specifies volume adjustments to be applied based on quality characteristics such as moisture content and foreign material content.

Use

The system uses the DPQS to evaluate the quality of a load, determine whether a load is of an acceptable quality, and calculate the relevant discounts or premiums. The results of the evaluation are used in the contract application process (to match loads to pricing trading contracts) and in the contract settlement process (to apply relevant discounts or premiums).

Structure

A DPQS consists of a volume schedule and a value schedule. First, you define a volume schedule. Then, you define a value schedule and assign the relevant volume schedule to it.

Volume Schedules

Volume schedules are used to determine whether a quantity should be adjusted based on the value of a characteristic. For example, if the quality characteristic, moisture, is between 0 and 10%, the load quantity may need to be reduced by 1% for each 1% of moisture to determine the actual quantity to apply against the contract. A volume schedule contains the following information:

- **Header Information**
  The header includes information such as the *Schedule Name*, the *Material*, the *Regulatory Agency*, and the validity date range.
- **DPQS Characteristic Information**
  The characteristic information includes the relevant characteristics for the material (for example, moisture content), along with details such as the number of decimal places, the measurement unit, and whether the characteristic affects contract application and/or contract settlement.
- **DPQS Characteristic Range List**
  The characteristic range list specifies the valid value ranges for each characteristic and the increase or decrease in quantity to be applied for each one, as illustrated in the following example:

> **⁂ Example**
>
> | Characteristic | Minimum Value | Maximum Value | Adjustment | Per Increment |
> |---|---|---|---|---|
> | Moisture | 0% | 3% | -1% | 1% |
> | Moisture | 4% | 7% | -2% | 1% |
> | Foreign Material | 0% | 2% | -1% | 1% |
> | Foreign Material | 3% | 4% | -2% | 1% |

Value Schedules

Value schedules are used to determine the acceptable value ranges for the quality characteristics for a commodity, along with any relevant premiums and discounts. A volume schedule contains the following information:

- **Header Information**
  The header includes information such as the *Schedule Name*, the *Material*, the *Regulatory Agency*, the validity date range, and the name of the related volume schedule.

- **DPQS Characteristic Information**
  The characteristic information includes the relevant characteristics for the material (for example, moisture content), along with details such as the number of decimal places, the measurement unit, and whether the characteristic affects contract application and/or contract settlement.

- **DPQS Characteristic Range List**
  The characteristic range list specifies the valid value ranges for each characteristic and the discount or premium to be applied for each one, as illustrated in the following example:

> ⁂ Example
>
> | Characteristic | Minimum Value | Maximum Value | Charge Type | Action |
> | --- | --- | --- | --- | --- |
> | Moisture | 0% | 2% | Premium | Accept |
> | Moisture | 3% | 6% | Discount | Accept |
> | Moisture | 7% | 100% | | Reject |

- **Material Schedule**
  A material schedule is a list of the materials that are acceptable for evaluation during contract application. The system uses the material schedule to limit the number of possible matching contracts, prior to comparing the actual load values with those required by the DPQS data in the contract. When a value schedule is saved, the system generates the material schedule based on the material classifications defined for the entered material. For example, a class of materials, CORN, may be defined with a broad range of values for characteristics such as moisture, foreign material content, and broken kernels. Materials such as Yellow Corn 1, Yellow Corn 2, and Yellow Corn 3 may be defined as members of this class with smaller, possibly overlapping ranges for the characteristics. Depending on the ranges defined in the value schedule, one or more of these materials may be included on the corresponding material schedule.

Integration

You define DPQS volume schedules and values schedules as master data. Then, you assign a DPQS value schedule to a commodity contract. Note that a value schedule already has an associated volume schedule, so you don't need to assign a volume schedule to the contract. The DPQS data for the contract is used during the contract application and contract settlement processes.

More Information

3.1.1 Creation of Discount Premium Quality Schedules

Use

Discount premium quality schedules (DPQS) are defined as master data, and then assigned to commodity contracts. The DPQS is used to define the acceptable quality terms for the contract.

The following constraints apply:

- Only one DPQS value schedule can be defined as the default schedule for a plant for a given time period.
- Only schedules with a status of released may be used in contracts.
  When you create a volume schedule or a value schedule, the system defaults its status to draft. When you have finalized the schedule, you change its status to released, and it becomes available for use in the system. If a schedule is no longer valid, you can change its status to retired.

Process

1. If required, you create global derived characteristics (see Creating Global Derived Characteristics [page 26]).
2. You create a volume schedule (see Creating Volume Schedules [page 29]).
3. You simulate the volume schedule (see Simulating Volume Schedules [page 32]).
4. You release the volume schedule (see Setting Status of Volume Schedules [page 33]).
5. You assign the volume schedule to a Trader's and Scheduler's Workbench (TSW) location (see Assigning Volume Schedules to TSW Locations [page 34]).
6. You create a value schedule (see Creating Value Schedules [page 34]).
7. You simulate the value schedule (see Simulating Value Schedules [page 38]).
8. You release the value schedule (see Setting Status of Value Schedules [page 38]).
9. You assign the value schedule to a TSW location (see Assigning Value Schedules to TSW Locations [page 39]).

3.1.1.1 Creating Global Derived Characteristics

Prerequisites

- You are authorized to create global derived characteristics.
- You have maintained the calculation rules in Customizing for *Logistics - General* under ▶ *Global Trade Management* ❯ *Agricultural Contract Management* ❯ *Setup for Master Data* ❯ *DPQS* ❯ *Maintain DPQS Parameters* ❯.

Context

Optionally, you can define global derived characteristics, which you can then use in discount premium quality schedules (DPQS).

For example, you could define a global derived characteristic based on moisture content and foreign material content. Then, in a value schedule, you could use this global derived characteristic to apply an additional discount when the moisture content and the foreign material content both exceed 3%.

Procedure

1. On the *SAP Easy Access* screen, choose ▶ *Agricultural Contract Management* ❯ *Master Data* ❯ *Discount Premium Quality Schedules* ❯ *Maintain Global Derived Characteristics* ❯.
2. Double click the *Create Global Derived Char.* node.
3. Enter the required data and press ENTER .

   The *Unit/Calculation Rule* screen area and the *Characteristics Selection* screen area appear.
4. Enter the required data.
5. Save your entries.

Results

You can now use the new global derived characteristic in DPQS volume schedules and value schedules.

Next Steps

To change an existing global derived characteristic, on the *Global Derived Characteristic* screen double click the *Change Global Derived Char.* node.

To display an existing global derived characteristic, on the *Global Derived Characteristic* screen double click the *Display Global Derived Char.* node.

To create a global derived characteristic with Duval calculation rule, see Example: Duval Calculation [page 27].

3.1.1.1.1 Example: Duval Calculation

Use

A flag which indicates whether the "Duval" calculation rule should be applied for the DPQS calculation. By selecting the checkbox for Duval, the industry standard default values will be used, instead of using the actual characteristic values.

The following scenario represents a case in which the Duval calculation can be utilized:

A company purchases a commodity, for example wheat, immediately via a purchase contract. In this case, the Duval calculation rule can be applied, if the company decides to use industry standard default values for volume adjustments for certain characteristics, instead of using the actual characteristic values reported by the vendor or determined by the company.

The calculation formula is as follows:

Gross Weight x (Input % - Standard %) / (100 % - Commercial Default %)

Prerequisites

You have maintained the calculation rule and the derived rule for Duval in Customizing for *Logistics - General* under ▮ *Global Trade Management* ❯ *Agricultural Contract Management* ❯ *Setup for Master Data* ❯ *DPQS* ❯ *Maintain DPQS Parameters* ❳.

Process

Create Global Derived Characteristic for Duval

1. Choose *SAP Easy Access* menu ▮ *Agricultural Contract Management* ❯ *Master Data* ❯ *Discount Premium Quality Schedules* ❯ *Maintain Global Derived Characteristics* ❳.

2. Choose *Create Global Derived Char.* and enter the following data in the *Global Derived Characteristics* screen area:

   ○ *Characteristic*

   ○ *Description*

   ○ *Material*

   ○ *Int. meas. unit* (unit of measure)
   Choose `%` (percentage).

   ○ *Calculation Rule*
   Choose `DVL` (Duval Calculation).

3. Select one characteristic, for example `MOISTURE (%)`, under the *Characteristics Selection* screen area.

4. Under the *Calculation Rule* screen area, enter the relevant *Mapped Characteristic* (`MOISTURE (%)` in this case) and the *Reference Value*.
   You can now use this global derived characteristic for volume schedule in DPQS calculation.

Use Global Derived Characteristic for Duval in Calculation

1. Choose *SAP Easy Access* menu ▶ *Agricultural Contract Management* ❯ *Master Data* ❯ *Discount Premium Quality Schedules* ❯ *Maintain Volume and Value Schedule* ❯.

2. Choose *Volume Schedule* and search the relevant volume schedule under the *DPQS Selection Screen* area.
   The relevant DPQS schedule header data and characteristic appear.

3. On the *Characteristic* tab under the *DPQS Characteristic* screen area, you will see the original characteristic (for example `MOISTURE`) mapped and the global derived characteristic (for example `DUVAL_MOISTURE`) defined.

4. Enter the characteristic value with the original characteristic.
   Make sure that the `DVL` is selected for calculation rule and the `Multiplier` is selected for calculation method respectively.

5. On the *Simulate DPQS* tab, enter the relevant quantity and the characteristic value, and then run the simulation. Based on the input value, the Duval calculation takes place.

❖ Example

The following example shows how the Duval calculation rule is applied to calculate the net weight of a commodity.

- Gross Weight: 10,000 Pounds
- Moisture: 20%

  > i Note
  >
  > It is dried (shrink) down to 14% due to the moisture or the commercial standard of 14% is applicable in this case.

The net weight can be calculated using the Duval calculation rule as follows:

Shrink due to Moisture:

= 10,000 x (0.20 - 0.14) / (1.00 - 0.14)

= (10,000 x 0.06) / 0.86

= 600 / 0.86

= 697.67 Pounds

> **Net Weight:**
>
> = 10,000 - 697.67
>
> = 9,302.3 Pounds

More Information

Creating Global Derived Characteristics [page 26]

3.1.1.2 Creating Volume Schedules

Use

You create volume schedules as part of the discount premium quality schedules (DPQS) master data. Then, when you create a value schedule, you assign the appropriate volume schedule to it.

Prerequisites

- You are authorized to create volume schedules.
- You have maintained the calculation rules and derived rules in Customizing for *Logistics - General* under ▶ *Global Trade Management* ❭ *Agricultural Contract Management* ❭ *Setup for Master Data* ❭ *DPQS* ❭ *Maintain DPQS Parameters* ❭.
- If required, you have created global derived characteristics (see Creating Global Derived Characteristics [page 26]).

Procedure

Creating Volume Schedules

1. On the *SAP Easy Access* screen, choose ▶ *Agricultural Contract Management* ❭ *Master Data* ❭ *Discount Premium Quality Schedules* ❭ *Maintain Volume and Value Schedule* ❭.
2. Double-click the *Maintain Volume Schedule* node.
3. In the *List of Schedules* screen area, choose 🗋.
4. In the *Header Information* screen area, enter the required data.
5. On the *Characteristic* tab page in the *DPQS Characteristic* screen area, choose 🖼.
   You have the following options:
   - *Add Characteristics*

Choose this option to add a characteristic such as moisture content or foreign material content.

- ○ *Add Local Derived Characteristics*
  Choose this option to define a new derived characteristic for this volume schedule.
- ○ *Add Global Derived Characteristics*
  Choose this option to add a predefined derived characteristic (see Creating Global Derived Characteristics [page 26]).

6. Choose the required characteristic, enter the required data for the characteristic, and press ⌷Enter⌷.
   You can maintain the *Base Net* and the *Volume Calculation Rule* columns if you want to use the corresponding characteristic as a base net for the volume schedule of the DPQS calculation. For more information, see Example: Base Net Calculation [page 31].
7. Double-click the row for the characteristic.
   The *DPQS Characteristic Range List* screen area appears.
8. On the *Characteristic Range* tab page in the *DPQS Characteristic Range List* screen area, choose 📇.
9. Enter the required data and press ⌷Enter⌷.
   You can enter as many rows as you require to specify the necessary ranges.
10. Save your entries.

Adjusting Evaluation Sequences

Optionally, you can use this procedure to adjust the order in which the system evaluates each characteristic.

1. In the *DPQS Characteristic* screen area, choose the *Characteristic Sequence* tab page.
2. Select the characteristic you want to move.
3. Choose one of the following options:

   - ○ ▲: moves the selected characteristic up
   - ○ ▼: moves the selected characteristic down
   - ○ ▲: moves the selected characteristic to the top
   - ○ ▼: moves the selected characteristic to the bottom

4. Save your entries.

More Information

To create a copy of an existing schedule, in the *List of Schedules* screen area, select the schedule you want to copy and choose 📄.

You can test new volume schedules using the simulation function. For more information, see Simulating Volume Schedules [page 32].

Before you can assign a volume schedule to a value schedule, you must set its status to *Released*. For more information, see Setting Status of Volume Schedules [page 33].

3.1.1.2.1 Example: Base Net Calculation

Definition

A flag which indicates whether the characteristic marked is used as a base net for the volume schedule of the DPQS calculation. You can set the *Base Net* flag for more than one characteristic, such as moisture, heat, broken, damaged, foreign material and so on.

The base net weight will be the sum of the adjusted weights for which the corresponding characteristics are flagged as base net.

On the *Characteristic* tab you specify a characteristic which you want to use as the base net weight by selecting the corresponding checkbox in the *Base Net* column. Then, in the *Volume Calculation Rule* column, by choosing the value *Base Net*, you select a characteristic to which the base net should be applied in the DPQS calculation.

When you calculate the values on the *Simulate DPQS* tab, instead of using the adjusted values progressively according to the characteristic sequence defined, the *Net Adjusted Application Value* of the characteristic marked will be used as the base net to calculate the corresponding value for the characteristic to which you selected the base net for the volume calculation rule.

Use

> ⁘ Example
>
> The following is an example for base net weight:
>
> **Assumptions**
>
> 1. The volume schedule A includes the characteristics for *Moisture*, *Foreign Material*, and *Damaged* and they are listed in this order on the *Characteristic Sequence* tab.
> 2. The pre-adjusted volume for a load of wheat is 1000MT.
> 3. The *Base Net* checkbox and the *Volume Calculation Rule* value (`Base Net`) are set as follows:
>   - The *Moisture* characteristic is flagged as the *Base Net* (checkbox is marked).
>   - The moisture adjustment is 1% for every 1% from 1 to 15%.
>   - The moisture is 12% which is 3 increments from 15%, and therefore the moisture adjustment will be 3% or 30MT.
>   - The base net calculation can take place as follows: 1000MT - 30MT = 970MT
>   - The *Foreign Material* characteristic is assigned with *Volume Calculation Rule* value (`Base Net`) to calculate off the base net.
>   - The foreign material content adjustment is determined to be 6%, and therefore 970MT x 6% = 58.2MT.
>   - The *Damaged* characteristic is assigned with *Volume Calculation Rule* value (`Base Net`) to calculate off the base net.
>   - The damaged content adjustment is determined to be 2%, and therefore 970MT x 2% = 19.4MT.
>
> **Final Net Adjusted Volume Calculation**

> The final net adjusted volume for the load of wheat will be calculated as follows:
>
> 1000MT - 30MT (adjustment for moisture) - 58.2MT (adjustment for foreign material) - 19.4MT (adjustment for damaged) = **892.4MT**

More Information

Creating Volume Schedules [page 29]

3.1.1.3 Simulating Volume Schedules

Context

You can test a volume schedule by viewing the values the system calculates for specified input parameters. You enter a base quantity, a base unit, and characteristic values; then, the system calculates the contract application and settlement quantities based on your inputs.

Procedure

1. On the *SAP Easy Access* screen, choose ▌▶ *Agricultural Contract Management* ❯ *Master Data* ❯ *Discount Premium Quality Schedules* ❯ *Maintain Volume and Value Schedule* ▐.
2. Double click the *Maintain Volume Schedule* node.
3. Enter the *Volume Schedule Name* and choose 🕒.
4. In the *List of Schedules* screen area, select a schedule and choose 🔗.
5. In the *DPQS Characteristic* screen area, choose the *Simulate DPQS* tab page.
6. Enter the required data.
7. Choose ▦.

Results

For each characteristic, the system calculates and displays the following values :

- *Application Adjustment Value*
- *Net Adjusted Application Value*

- *Settlement Adjustment Value*
- *Net Adjusted Settlement Value*

3.1.1.4   Setting Status of Volume Schedules

Prerequisites

You are authorized to create volume schedules.

Context

A volume schedule can have one of the following statuses:

- **Draft**
  The system defaults the status of new volume schedules to draft. This status indicates that you are still working on the volume schedule and it is not ready for use in the system.
- **Released**
  Before you can assign a volume schedule to a value schedule, you must set its status to released.
- **Retired**
  To prevent a volume schedule from being assigned to any new value schedules, you must set its status to retired.

Procedure

1. On the *SAP Easy Access* screen, choose ▶ *Agricultural Contract Management* ❯ *Master Data* ❯ *Discount Premium Quality Schedules* ❯ *Maintain Volume and Value Schedule* ❯.
2. Double-click the *Maintain Volume Schedule* node.
3. In the *DPQS Selection Screen*, enter the details of the volume schedule you want to release\retire.
4. Choose 🕐.

   The system displays the *List of Schedules* that match your selection criteria.

5. In the *List of Schedules* screen area, select the schedule you want to release\retire and choose 🗸.
6. Choose the relevant option (*Release DPQS* or *Retire DPQS*).

3.1.1.5   Assigning Volume Schedules to TSW Locations

Prerequisites

You are authorized to assign volume schedules to TSW locations.

Context

You can assign a volume schedule to a Trader's and Scheduler's Workbench (TSW) location. The TSW location links a volume schedule to a plant. Then, the system uses the plant to determine whether the volume schedule is permissible in a contract. You assign a volume schedule to a TSW location in Business Rule Framework plus (BRFplus).

Procedure

1. Enter transaction `BRFPLUS`.

   The *BRFplus Workbench* appears.
2. Choose the *Catalog* tab page.
3. Choose *Select Catalog* and then choose the relevant catalog for S *AP Agricultural Contract Management*.
4. Choose the volume schedule assignment rule.

   The rule details appear.
5. Choose *Edit*.
6. Choose 📇.
7. Enter the required data.
8. Save your entries.
9. Activate your changes.

3.1.1.6   Creating Value Schedules

Use

You define value schedules as part of the discount premium quality schedules (DPQS) master data. Then when you create a commodity contract, you assign the appropriate DPQS value schedule to it.

Prerequisites

- You have authorization to create value schedules.
- You have maintained the calculation rules and derived rules in Customizing for *Logistics - General* under ▶ *Global Trade Management* ❯ *Agricultural Contract Management* ❯ *Setup for Master Data* ❯ *DPQS* ❯ *Maintain DPQS Parameters* ❯.
- You have created volume schedules (see Creating Volume Schedules [page 29]).

> **i Note**
>
> It is mandatory to assign a volume schedule to a value schedule. Therefore, a volume schedule for the material must already exist.

- If required, you have created global derived characteristics (see Creating Global Derived Characteristics [page 26]).

Procedure

Creating Value Schedules

1. On the *SAP Easy Access* screen, choose ▶ *Agricultural Contract Management* ❯ *Master Data* ❯ *Discount Premium Quality Schedules* ❯ *Maintain Volume and Value Schedule* ❯.
2. Double-click the *Maintain Value Schedule* node.
3. In the *List of Schedules* screen area, choose 🗋.
4. In the *Header Information* screen area, enter the required data and press `Enter`.
   The possible characteristics for the material are displayed on the *Characteristic* tab page in the *DPQS Characteristic* screen area.
5. On the *Characteristic* tab page in the *DPQS Characteristic* screen area, select any unwanted characteristics and choose 🖩.
6. Enter the required data for the remaining characteristics, and press `Enter`.
7. To enter the range values for a characteristic, double-click the relevant characteristic row.
   The *DPQS Characteristic Range List* screen area appears.
8. On the *Characteristic Range* tab page in the *DPQS Characteristic Range List* screen area, choose 🖬.
9. Enter the required data and press `Enter`.
   You can enter as many rows as you require to specify the necessary ranges. The ranges you enter should cover all possible values between 0% and 100%, and specify whether matching loads should be accepted or rejected.
10. Save your entries.

Adjusting Valuation Sequences

Optionally, you can use this procedure to adjust the order in which the system evaluates each characteristic.

1. In the *DPQS Characteristic* screen area, choose the *Characteristic Sequence* tab page.
2. Select the characteristic you want to move.

3. Choose one of the following options:

   - ▲ : moves the selected characteristic up
   - ▼ : moves the selected characteristic down
   - ⏫ : moves the selected characteristic to the top
   - ⏬ : moves the selected characteristic to the bottom

4. Save your entries.

More Information

To create a copy of an existing schedule, in the *List of Schedules* screen area, select the schedule you want to copy and choose 🗐.

You can define dependency of one characteristic on another characteristic by changing the characteristics definition at the value schedule and evaluation process within the settlement. For more information, see Example: Conditional DPQS [page 36].

You can test new value schedules using the simulation function. For more information, see Simulating Value Schedules [page 38].

Before you can assign a value schedule to a commodity contract, you must set its status to *Released*. For more information, see Setting Status of Value Schedules [page 38].

3.1.1.6.1   Example: Conditional DPQS

Definition

Normally a Discount Premium Quality Schedule (DPQS) calculated within the settlement is based on the characteristic ranges defined in the value schedule and the actual results received at the time of the Load Data Capture (LDC). With the **Conditional DPQS** feature, it is possible to define the dependency of one characteristic on another characteristic. This has been realized by changing the characteristics definition at the value schedule and evaluation process within the settlement.

The three new fields have been added to the characteristics ranges in the value schedule definition as a part of master data changes.

The following fields allow you to link and define the dependent characteristics:

1. *Characteristics*
2. *Operator*
3. *Characteristics Value*

Use

The following is an example of how conditional DPQS works:

> ⁂ Example
>
> **Conditions**
>
> 1. Foreign material is between 15.01% and 20.00%, **and**
> 2. Moisture is greater than or equal to 6% (**This is the dependency**)
>
> The dependency condition is only applicable for the acceptable ranges. The *Characteristics* field has either a flat characteristic, a Global Derived Characteristic or a Local Derived Characteristic. Based on the characteristics and type, the following approach is applicable:
>
> **Flat Characteristics**
>
> The *Characteristics Value* field is compared against the actual value of the characteristic fetched from the LDC. If the values from both dependent and depending characteristics fall within the acceptable range, then the discount or premium is calculated within the settlement.
>
> **Global Derived Characteristic or Local Derived Characteristic**
>
> For global derived characteristic or local derived characteristic, the approach is also similar to the flat characteristics defined above. This means that the values from both dependent and depending characteristics should fall within the acceptable range for the discount or premium calculated within the settlement. The difference between the two is that the global derived characteristic or local derived characteristic may have included more than one characteristic grouped together and therefore all the characteristics should fall within the acceptable range.

Activities

To maintain the conditional DPQS, on the *SAP Easy Access* screen, choose ▌ *Agricultural Contract Management* ❯ *Master Data* ❯ *Discount Premium Quality Schedules* ❯ *Maintain Volume and Value Schedule* ▌.

More Information

Creating Value Schedules [page 34]

3.1.1.7 Simulating Value Schedules

Context

You can test a value schedule by viewing the values the system calculates for specified input parameters. You enter a base quantity, base unit, base price, and characteristic values; then, the system calculates the adjusted values.

Procedure

1. On the *SAP Easy Access* screen, choose ▐▶ *Agricultural Contract Management* ❯ *Master Data* ❯ *Discount Premium Quality Schedules* ❯ *Maintain Volume and Value Schedule* ❯.
2. Double-click the *Maintain Value Schedule* node.
3. Enter the *Value Schedule Name* and choose 🕑.
4. In the *List of Schedules* screen area, select a schedule and choose 👓.
5. In the *DPQS Characteristic* screen area, choose the *Simulate DPQS* tab page.
6. Enter the required data.
7. Choose 👣.

Results

For each characteristic, the system calculates the following values:

- *Adjustment Value*
- *Net Adjusted Value*
- Action (Accept or Reject)

3.1.1.8 Setting Status of Value Schedules

Prerequisites

You are authorized to create value schedules.

Context

A value schedule can have one of the following statuses:

- **Draft**
  The system defaults the status of new value schedules to draft. This status indicates that you are still working on the value schedule and it is not ready for use in the system.
- **Released**
  Before you can assign a value schedule to a commodity contract, you must set its status to released.
- **Retired**
  To prevent a value schedule from being assigned to any new contracts, you must set its status to retired.

Procedure

1. On the *SAP Easy Access* screen, choose ▌▶ *Agricultural Contract Management* ❯ *Master Data* ❯ *Discount Premium Quality Schedules* ❯ *Maintain Volume and Value Schedule* ◀▐.
2. Double-click *Maintain Value Schedule* node.
3. In the *DPQS Selection Screen*, enter the details of the value schedule you want to release\retire.
4. Choose 🔍.

   The system displays the *List of Schedules* that match your selection criteria.

5. In the *List of Schedules* screen area, select the schedule you want to release\retire and choose ✅.
6. Choose the relevant option (*Release DPQS* or *Retire DPQS*).

3.1.1.9   Assigning Value Schedules to TSW Locations

Prerequisites

You are authorized to assign value schedules to TSW locations.

Context

You can assign a value schedule to a Trader's and Scheduler's Workbench (TSW) location. The TSW location links a value schedule to a plant. Then, the system uses the plant to determine whether the schedule is permissible in a contract.

Procedure

1. On the *SAP Easy Access* screen, choose ▌▶ *Agricultural Contract Management* ❯ *Master Data* ❯ *Discount Premium Quality Schedules* ❯ *Assign Value Schedule to TSW Location* ◗.

2. Double-click the *Create DPQS Asgns* node.

   The *Create Value Schedule Assignment* screen appears.

3. Enter the required data and choose 🗋.

   If you want to make this value schedule the default for the entered combination (*TSW Location* and *Mode of Transport*), select the *Default* checkbox.

   If you want all of the subnodes of the selected TSW location to use the same default, select the *Automatically Accept Proposals* checkbox. If the *Automatically Accept Proposals* checkbox is not selected and the location has subnodes, the system displays the subnodes, and you can select the rows for which the value schedule is default.

4. Save your entries.

3.2 Tolerance Schedule

Definition

A tolerance schedule defines the quantity above and below the contracted or delivery quantity that may be applied towards the fulfillment of the contract. It enables the counterparties to define the acceptable overfill and underfill delivery quantities, and the relevant price adjustments.

Structure

A tolerance schedule contains the following information:

- **Header Information**
  The header information includes an ID, a description, and a status.
- **Schedule Lines**
  Typically, there is a minimum of one line for underfill and one line for overfill. Each schedule line is defined using the following fields:
  - *Direction (Underfills/Overfills)*
    Defines whether the schedule line is applicable for an underfill or an overfill.
  - *Percentage From* and *Percentage To*
    Defines the valid percentage range.
  - *Absolute Tolerance Value*
    Defines an absolute quantity that can be applied. This quantity must be in the same unit of measure as the contract.

- ○ *Tolerance is Higher/Lower of Percentage or Value*
  If both a percentage range and an absolute value are entered, this field states whether the higher or the lower of the two values should be applied.
  Note that if this value is used, only one overfill line and one underfill line can be entered for the schedule.
- ○ *Price Application (Flat/Tiered)*
  A price can be applied to an underfill/overfill quantity in the following ways:
  - ○ `Flat Pricing`: a flat price is applied to the entire overfill/underfill quantity
  - ○ `Tiered Pricing`: a different price is applied depending on the amount of overfill/underfill
- ○ *Replacement Base Price*
  The overfill/underfill quantity can be settled at the contract price or a different negotiated price.
- ○ *Weighted Average Price/Last Pricing Lot Consumed*
  This field applied to overfills. The price for an overfill quantity can be based on either a weighted average of the prices in the pricing lots consumed by the delivery, or the price of the last consumed pricing lot.

Integration

You define tolerance schedules as master data. When you create a new commodity contract, you must assign it a tolerance schedule. The details of the tolerance schedule are copied into the contract and can then be modified, if required. During execution of the contract, the system refers to the tolerance schedule captured within the contract (not the tolerance schedule stored as master data) to determine how to price overfills or underfills.

Example

Example 1: Tolerance Schedule Using Percentage Ranges

Direction	%	Absolute Value	Tolerance is Higher/Lower of % or Value	Price Application (Flat/ Tiered)	Replacement Base Price	Weighted Avg. Price/Last Pricing Lot Consumed
Under	0 to 10			Flat tolerance pricing	Contract Price	
Over	1 to 2			Flat tolerance pricing	Contract Price	Last pricing lot consumed
Over	>2 up to 7			Flat tolerance pricing	Negotiated Price	
Over	>7 up to 10			Tiered tolerance pricing	Negotiated Price	

Example 2: Tolerance Schedule Using Percentage Ranges and Absolute Values

Direction	%	Absolute Value	Tolerance is Higher/Lower of % or Value	Price Applica-tion (Flat/Tiered)	Replacement Base Price	Weighted Avg. Price/Last Pricing Lot Consumed
Under	0 to 5	4mt	Lower	Flat tolerance pricing	Contract Price	
Over	0 to 10	5mt	Higher	Flat tolerance pricing		

More Information

3.2.1 Creating Tolerance Schedules

Prerequisites

You are authorized to create tolerance schedules.

Context

You define volume tolerance schedules as master data. Then, when you create a commodity contract, you assign the appropriate tolerance schedule to it.

Procedure

1. On the *SAP Easy Access* screen, choose ▷ *Agricultural Contract Management* ❯ *Master Data* ❯ *Maintain Tolerance Schedule* ❯.
2. Double-click the *Maintain Tolerance Schedule* node.

3. In the *List of Tolerance Schedules* screen area, choose ▢.

4. In the *Header Information* screen area, enter a *Tolerance Sch. ID* (Tolerance Schedule ID) and a description.

5. In the *Maintain Tolerance Schedule Attributes* screen area, choose 🟩.

    A context menu appears.

6. Choose *Add Overfill Tolerance* to add a schedule line for an overfill, or *Add Underfill Tolerance* to add a schedule line for an underfill.

    A new line appears.

    > **i Note**
    >
    > A tolerance schedule usually contains at least one line for underfills and one line for overfills. However, you can enter multiple lines for underfills and multiple lines for overfills, if required.

7. Enter the required data.

8. Save your entries.

3.2.2 Setting Status of Tolerance Schedules

Context

A tolerance schedule can have one of the following statuses:

- **Draft**
  The system defaults the status of new tolerance schedules to draft. This status indicates that you are still working on the tolerance schedule and it is not ready for use in the system.
- **Released**
  Before you can assign a tolerance schedule to a commodity contract, you must set its status to released.
- **Retired**
  To prevent a tolerance schedule from being assigned to any new contracts, you must set its status to retired.

Procedure

1. On the *SAP Easy Access* screen, choose ▶ *Agricultural Contract Management* ❯ *Master Data* ❯ *Maintain Tolerance Schedule* ❯.

2. Double-click the *Maintain Tolerance Schedule* node.

3. Enter the relevant *Tolerance Sch. ID* (Tolerance Schedule ID) and choose 🕒.

4. In the *List of Tolerance Schedules* screen area, select the relevant tolerance schedule and choose 🖍.

5.   Choose the relevant option (*Release Tolerance* or *Retire Tolerance*).

3.3   Valuation Point

Definition

You use valuation points to automatically determine the pricing approach for individual line items in a commodity contract. You do this by specifying a valuation point on the *Valuation Data* tab page in the commodity contract. Before you can use them, you must set them up in master data. The valuation point is an optional field.

Use

To do this, on the *SAP Easy Access* screen, choose ▶ *Agricultural Contract Management* ❯ *Master Data* ❯ *Maintain Valuation Point* ❯. Here you can enter an ID and a description for your new valuation point, and set it as active or inactive.

More Information

Pricing Approach [page 68]

4 Contract Capture and Maintenance

Contract capture is the first step in the agricultural commodity contract process. During contract capture you define the terms and conditions that govern the execution of the remaining steps in the contract process, including call-off, load data capture, contract application, contract settlement, and contract closure. The contract details captured include the counterparty, the contract period, the commodity, the quality terms, and the tolerance terms. When you create a commodity contract, the system creates a pricing trading contract (TC) in the background. The system uses the pricing TC along with a logistics TC to manage the contract execution process. For more information about the structure and content of a commodity contract, see Commodity Contract [page 45].

During the period of the contract, you can amend the contract terms. For example, you can extend the period of the contract or increase the contract quantity. However, any contract amendments are subject to validation, and if a call-off or application document exists for the contract, then certain amendments are not permitted. For more information about creating and maintaining contracts, see Contract Management [page 50].

Note that contract capture and maintenance can also be done through a third party trading system. For more information about this scenario, see Possible Third Party Integration [page 220].

4.1 Commodity Contract

Definition

A commodity contract is a document that represents an agreement between a buyer and a seller of a commodity. It contains all of the terms and conditions that have been agreed between the buyer and the seller.

Use

The details in the commodity contract are used to match loads to contracts during contract application and to calculate financial settlements.

The system supports the following contract types:

- Third Party Purchase
- Third Party Sale
- Intracompany
- Intercompany
- Spot Purchase
- Commingled Stock
- Washout (and the Circle variation)

Structure

A commodity contract is structured as follows:

- **Contract Header**
  The contract header contains details that are relevant to the entire contract, including the trade counterparty, the external number, and the payment terms.
- **Line Item**
  A contract line item contains information about the commodity such as the batch, plant, quantity, and order unit.
- **Commodity Item**
  A commodity item is an extension of the contract line item, and it contains additional information that is specifically required for the management of an agricultural commodity contract. This information includes the following details:
  - Acceptable quality terms and associated pricing adjustments (see Contract DPQS Data [page 46])
  - Tolerances for overfills and underfills (see Contract Tolerances [page 47])
  - Additional logistics options (optionalities) (see Contract Optionalities [page 48])
  - Associated related trades (see Contract Related Trades [page 49])

4.1.1 Contract DPQS Data

Use

When you create a commodity contract, you must assign a discount premium quality schedule (DPQS) to it. A DPQS includes a value schedule, a volume schedule, and a material schedule. However, you only need to assign a value schedule to a commodity contract, as each value schedule already has an associated volume schedule and material schedule.

Prerequisites

You have defined DPQS master data. For more information, see Creation of Discount Premium Quality Schedules [page 25].

Activities

You assign a DPQS to a commodity contract on the *DPQS* tab page for the commodity item. The system also provides the following options:

- **Timing**
  The *Timing* option determines when, during the execution of the contract, the system applies the DPQS (for example, at contract, at load, or at discharge).

- **Schedule at Unload Location**
  If you select the *Schdl at Unload Loc* (Schedule at Unload Location) checkbox, the system uses the default DPQS for the discharge location, and you do not need to enter a *Schedule Name*. For example, this option may be used in cases where the contract has more than one discharge location. The system determines the relevant schedule for the discharge location by using the TSW location assigned to the value schedule.

- **Override Base Schedule**
  The details of the selected value schedule are displayed on the *DPQS* tab page. By default, this information is display only. However, if you select the *Override* checkbox, you can choose to omit characteristics or change the value ranges for characteristics. However, you cannot add new characteristics.

4.1.2 Contract Tolerances

Use

When you create a commodity contract you assign a tolerance schedule to it. You must also specify when, during the execution of the contract, that tolerance schedule should be applied.

Prerequisites

You have defined tolerance schedules. For more information, see Creating Tolerance Schedules [page 42].

Activities

You assign a tolerance schedule to a commodity contract on the *Tolerances* tab page for the commodity item. The details of the tolerance schedule are copied from master data into the contract. You can then modify the tolerance schedule details, if required. You must also specify the *Tolerance Type*. The system uses the *Tolerance Type* to determine how and when to apply the tolerance schedule rules to the contract. The following options are provided:

- **Per Delivery**
  Indicates that the tolerance schedule rules apply to the quantity delivered in each load. If you select this tolerance type, you must also enter the expected quantity for each load, so that the actual load quantity can be evaluated against the expected load quantity.

- **Per Delivery Period**
  Indicates that the tolerance schedule rules apply to the total quantity delivered within a given delivery period.

- **Per Contract**
  Indicates that the tolerance schedule rules apply to all the contract line items for a given commodity.

4.1.3 Contract Optionalities

Use

Optionally, you can maintain additional logistics options along with the discounts or premiums to be applied for those options. For example, you can specify a premium for a particular discharge location or a particular mode of transport. These additional logistics options are called optionalities.

Prerequisites

You have configured the optionality categories in Customizing for *Logistics - General* under ▶ *Global Trade Management* ❭ *Agricultural Contract Management* ❭ *Basic Settings* ❭ *Optionality* ❭ *Maintain Optionality Customizing* ❭.

Features

- **Optionality Categories**
  The solution is delivered with a set of predefined optionality categories. For example, these categories include Discharge Location, Incoterms, Mode of Transport, and Means of Transport.

- **Optionality Types**
  The *Optionality Type* determines how the system evaluates the optionalities during call-off, load data capture, and contract application. The following options are provided:

  - **Explicit**
    Explicit optionalities require a quantity to be declared before contract application is permitted for the quantity. This means that call-off must occur and values must be entered for the optionality categories. The contract cannot be applied to any load without a call-off.

  - **Implicit**
    Call-off is not required for implicit optionalities. However, contract application must match one of the defined optionalities for all categories where a value has been captured for the load (if no value is captured for the load, the category is ignored for matching purposes). Therefore, the contract can be applied to any load for which the optionality values entered in load data capture match the optionality values defined in the contract.

  - **Any**
    If you define optionalities as any, the contract can be applied to any load irrespective of the optionality values entered. However, for settlement, if a category value matches the load, the system applies the relevant premium or discount.

Activities

You define optionalities on the *Additional Contract Conditions* tab page for a commodity item.

Optionally, you can specify default values for the *Mode of Transport*, *Means of Transport*, *Crop Season ID*, and *Source Location*. Then, you enter further optionalities in the *Additional Optionality Values* screen area. You define each optionality by entering the following information:

- Optionality Category
- Value Type
- Option Value
- Premium or Discount Details

For step-by-step instructions for entering optionalities, see Entering Optionalities [page 56].

4.1.4 Contract Related Trades

Use

A commodity contract may be related to other contracts, for example, for pricing purposes (futures contracts), for intercompany or intracompany trades, or for washouts. This function enables you to view the related trades for a contract and also to add and delete related trades.

Prerequisites

You have configured related trade types in Customizing for *Logistics - General* under ▶ *Global Trade Management* ❯ *Agricultural Contract Management* ❯ *Basic Settings* ❯ *Configure Related Trade Types* ▶.

Features

When you create an intercompany or an intracompany contract, the system automatically creates a mirror contract (for a purchase contract, the system creates the corresponding sales contract, and vice versa). The system displays the details of the related mirror contract on the *Related Trades* tab page of the intercompany or intracompany contract.

You can also manually add or remove a related trade.

Activities

You enter related trades for a commodity contract on the *Related Trades* tab page for the commodity item. For more information, see Maintaining Related Trades [page 58].

4.2   Contract Management

Use

SAP Agricultural Contract Management provides enhanced contract capture screens that enable you to capture and maintain all of the complex terms and conditions required to manage agricultural commodity contracts.

In an alternative implementation scenario, commodity contracts can be captured and maintained in a third party trading system. For more information, see Possible Third Party Integration [page 220].

Activities

- **Create Contracts**

  To create a new commodity contract, on the *SAP Easy Access* screen choose ▶ *Agricultural Contract Management* ⟩ *Contract Management* ⟩ *Commodity Contract* ⟩ *Create* ◀. The commodity contract screen has the following levels:

  ○ Header Data
    When you first open the commodity contract screen, the contract header data is displayed. To navigate back to this level from the line item or commodity item level, choose 🖼.

  ○ Line Item
    To navigate to the line item level, choose *Overview*.

  ○ Commodity Item
    To navigate to the commodity item level, first navigate to the line item level, and then on the *Item Overview* tab page double click the line item number.

  For more information about the steps involved in creating a commodity contract, see Contract Capture [page 51].

- **Change Contracts**

  To amend an existing contract, on the *SAP Easy Access* screen choose ▶ *Agricultural Contract Management* ⟩ *Contract Management* ⟩ *Commodity Contract* ⟩ *Change* ◀.
  When you open an existing contract in change mode, the screen is similar to the screen used to create new contracts. You can edit the information in the contract with some restrictions if follow-on documents, such as sales orders, purchase orders, goods receipts, and so on, exist for the contract. You can display follow-on documents by choosing 🗂 on the *Commodity Items* tab page. Then, you can display the document details by choosing the relevant document in the *Trading Solution Document Flow* screen.
  For more information about changes to contracts, see Contract Amendments [page 59] and Cancellation [page 60].

- **Display Contracts**

  To view the details of an existing contract, on the *SAP Easy Access* screen choose ▶ *Agricultural Contract Management* ⟩ *Contract Management* ⟩ *Commodity Contract* ⟩ *Display* ◀. This option opens a display-only version of the commodity contract screen.
  For step-by-step instructions for displaying commodity item details, such as quantities and pricing aspects, see Displaying Commodity Item Details [page 61].

4.2.1 Contract Capture

Use

During contract capture, you define all of the terms and conditions that govern the execution of the contract. The system requires you to enter certain minimum information before you can save a new contract. For example, you must specify the tolerance schedule and discount premium quality schedule (DPQS) data. However, it is not mandatory to enter the pricing aspects before you save a new contract.

Prerequisites

- You have created tolerance schedules (see Creating Tolerance Schedules [page 42]).
- You have created DPQSs (see Creation of Discount Premium Quality Schedules [page 25]).

Process

1. You create a new commodity contract (see Creating Commodity Contracts [page 52]).
   You must enter the following minimum information:
   - Contract header data
   - Contract item data
   - Commodity Item data
   - Tolerances
   - DPQS data
2. You enter the pricing aspects (see Commodity Pricing Engine [page 63]).
3. Optionally, you can override the default DPQS data (see Overriding DPQS Data [page 55]).
4. Optionally, you can define additional logistics options (optionalities) (see Entering Optionalities [page 56]).
5. Optionally, you can create a pre-payment request (see Creating Pre-Payment Requests [page 57]).
6. Optionally, you can define related trades (see Maintaining Related Trades [page 58]).

Result

When you save a new commodity contract, the system creates a pricing trading contract document. This is the first document that appears in the *Document Flow*.

For intercompany and intracompany contracts, the system automatically creates a mirror contract. For example, when you save a new intercompany sales side contract, the system also creates a corresponding intercompany purchase side contract.

4.2.1.1 Creating Commodity Contracts

Prerequisites

- You have created tolerance schedules (see Creating Tolerance Schedules [page 42]).
- You have created discount premium quality schedules (DPQS) (see Creation of Discount Premium Quality Schedules [page 25]).

Context

Commodity contracts can be highly complex and contain many terms and conditions. Therefore, this procedure only describes how to enter the minimum information required to save a new contract.

Procedure

1. On the *SAP Easy Access* screen, choose ▶ *Agricultural Contract Management* ❯ *Contract Management* ❯ *Commodity Contract* ❯ *Create* ❯.

2. Enter the *Contract Type* and press `Enter`.

   If this is the first contract you have created, the system displays the *Organizational Data* dialog. Enter the required data and choose 🖳. The system displays the contract header details.

3. On the contract header screen, enter the contract counterparty (*Vendor* for purchase side contracts or *Sold-to Party* for sales side contracts) and *External Number*, and then press `Enter`.

   When you save a contract, the system automatically generates a unique trading contract number, however, you must also enter a user-defined external number. The external number is alphanumeric, therefore, you can enter something more descriptive than the contract number.

4. Choose *Overview*.

5. On the *Item Overview* tab page, enter the *Material*, *Plant*, *Quantity Ordered*, and *Order Unit*, and then press `Enter`.

6. In the *Item Number* column, double click the line item number.

   The commodity item details appear.

7. Choose the *Commodity Items* tab page.

8. Choose 🟩 and enter the required data.

   > **i Note**
   >
   > ○ You can only create one commodity item line for a particular line item.
   > ○ The *Commodity Item Quantity* you enter must equal the line item quantity.

> ○ The validity date range is mandatory (*Date From* and *Date To*).

9. Choose the *DPQS* tab page and enter the required data.
10. Choose the *Tolerance* tab page and enter the required data.
11. Save your entries.

Next Steps

4.2.1.2 Copying Commodity Contracts

Prerequisites

- If you want to create a contract as a copy of a template, you have defined templates as an available contract type in Customizing for *Agricultural Contract Management* under ▶ *Basic Settings* ❯ *Maintain Contract Type Determination* ◗.
- You have created a contract or template that you want to use as a source contract.
- You have activated the Business Add-In implementation `/ACCGO/CMN_IM_TC`. You can do this in Customizing for *Agricultural Contract Management* under ▶ *Enhancements Using Business Add-Ins* ❯ *Contract Management* ❯ *Commodity Contracts* ❯ *Contract Copy* ❯ *Implementation: BAdI for Contract Copy* ◗.

Context

You can create a new commodity contract as a copy of an existing one by using the *Create with Reference* feature in contract creation. When you do this, ACM-specific data such as valuation points, tolerances, and DQPS is copied from the original contract, in addition to the data that is always copied by using *Create with Reference*, such as vendor and commodity item data. Pricing data and transactional data, such as the *Final Delivery* indicator, is not copied.

You can also use the *Create with Reference* feature to create a commodity contract as a copy of a template. A template is a type of contract that can be created and saved without the information that would usually be mandatory for a commodity contract, such as vendor or commodity item data.

Procedure

1. On the *SAP Easy Access* screen, choose ▸ *Agricultural Contract Management* ❯ *Contract Management* ❯ *Commodity Contract* ❯ *Create* ◂.

2. Enter the required contract type of your target contract and choose *Create with Reference*.

   If this is the first contract you have created, the system displays the *Organizational Data* dialog box. Enter the required data and choose 🖻. The system displays the *Create with Reference* dialog box.

3. To create a contract as a copy of an existing contract, choose the *Trading Contract* tab, enter the number of the existing contract, and choose `Enter`.

   To create a contract as a copy of a template, choose the *PreTrading Contract* tab, enter the number of the template, and choose `Enter`.

   If you do not know the number of the existing contract or template, you can search for it in the *External Number* field.

   The system displays the *Copy Item Data* dialog box.

4. In this dialog box, you can copy the existing item data or make changes in each line item and then copy. Make any required changes and choose *Execute*.

   The system displays your newly created contract.

5. Enter any further required data, such as pricing information and commodity item start and end date, and save the contract.

4.2.1.3 Approving Commodity Contracts

Prerequisites

- You have created a trading contract.
- You have the necessary authorization to approve the trading contract.

Context

A trading contract has to be duly approved by an authorized user. It is important that a contract is validated and approved before it is used in the following processes:

- Release of LDC (with Contract Reference)
- Call-off (in Purchase Order and Sales Order)
- Linking to the Application Document (Contract Application process)

For this purpose, a new tab screen has been added at the Contract Header level which consists of an Approval indicator, Approver Name and Approval Date.

> **i Note**
>
> There is a provision to set or reset the approval flag by using a Business Add-in (BAdI) implementation.

Procedure

1. On the SAP Easy Access screen, choose ▐▶ *Agricultural Contract Management* ❯ *Contract Management* ❯ *Commodity Contract* ❯ *Change* ▐ .
2. Enter the contract number and choose *Find*.
3. Choose the *Approval* tab in the *Contract Header* screen.
4. Select the *Approval Indicator* check box.

   Once the indicator is checked, the name of the Approver and the date of Approval gets populated in the respective fields.
5. Choose 💾 .

4.2.1.4 Overriding DPQS Data

Prerequisites

You have created a commodity contract and assigned a DPQS to it.

Context

When you create a commodity contract, you assign a discount premium quality schedule (DPQS) to it. Optionally, you can override the DPQS by omitting particular characteristics or modifying the value ranges for characteristics.

Procedure

1. On the *SAP Easy Access* screen, choose ▐▶ *Agricultural Contract Management* ❯ *Contract Management* ❯ *Commodity Contract* ❯ *Change* ▐ .
2. Enter the contract number and choose *Find*.
3. Choose *Overview*.

4. Double-click the line item number in the *Item Number* column.

   The commodity item details appear.

5. Choose the *DPQS* tab page.

   The details of the assigned DPQS are displayed on the *Characteristics Details* and *Range Details* tab pages. The details are display-only.

6. Select the *Override* check box and press `Enter`.

   The details on the *Characteristics Details* and *Range Details* tab pages become enabled for editing.

7. To omit a characteristic, select the relevant characteristic on the *Characteristics Details* tab page and then choose ⬚.

   > **i Note**
   >
   > It is not possible to add new characteristics to the DPQS.

8. To view the value ranges for a particular characteristic, double-click the relevant characteristic on the *Characteristics Details* tab page.

   The value ranges are displayed on the *Range Details* tab page. You can modify the details of the existing ranges. You can also add a new row by choosing ⬚, or delete a row by choosing ⬚.

9. Save your changes.

Results

The system saves the overrides you enter for the contract, and during the contract execution, the system applies the unchanged parts of the base (master data) DPQS along with the additional overrides you enter.

4.2.1.5   Entering Optionalities

Prerequisites

You have configured the optionality categories in Customizing for *Logistics - General* under ▮ *Global Trade Management* ❯ *Agricultural Contract Management* ❯ *Basic Settings* ❯ *Optionality* ❯ *Maintain Optionality Customizing* ▮.

Context

Optionally, you can define additional logistics options (optionalities) along with the discounts or premiums to be applied for those options.

Procedure

1. On the *SAP Easy Access* screen, choose ▌▶ *Agricultural Contract Management* ❯ *Contract Management* ❯ *Commodity Contract* ❯ *Change* ▐.
2. Enter the contract number and choose *Find*.
3. Choose *Overview*.
4. Double-click the line item number in the *Item Number* column.

   The commodity item details appear.
5. Choose the *Additional Contract Conditions* tab page.
6. Enter the *Optionality Type*, *Opt. Decl. by Date* (Date by Which Option Must be Declared), and *Buyer/Seller Opt.* (Buyer or Seller Option).
7. Optionally, you can enter default values for the Mode of Transport, Means of Transport, *Crop Season ID*, and *Source Location*.
8. Press `Enter`.

   Your default values (if entered) are displayed in the *Additional Optionality Values* screen area.
9. To add new optionality values, choose 📇, and then enter the required data. To delete an optionality value, select the row, and then choose 📇.
10. Save your entries.

4.2.1.6   Creating Pre-Payment Requests

Context

You use this procedure to enter pre-payment data for a contract and to make an initial payment for the order.

Procedure

1. On the *SAP Easy Access* screen, choose ▌▶ *Agricultural Contract Management* ❯ *Contract Settlement* ❯ *Manage Pre-Payment Requests* ▐.

2. Enter the contract number.

3. Enter the required payment terms.

4. Choose .

   The pre-payment data is defaulted for the contract.

5. Save your entries.

4.2.1.7 Maintaining Related Trades

Context

A commodity contract can be related to other contracts (for example, a washout contract), and these related trades are listed on the *Related Trades* tab page for the commodity item. You can add a related trade, delete a related trade, or display a related contract directly from the *Related Trades* tab page.

Procedure

1. On the *SAP Easy Access* screen, choose ❭ *Agricultural Contract Management* ❭ *Contract Management* ❭ *Commodity Contract* ❭ *Display* ❭.

2. Enter the contract number and choose *Find*.

3. Choose *Overview*.

4. Double-click the line item number in the *Item Number* column.

   The commodity item details appear.

5. Choose the *Related Trades* tab page.

   The related trades are listed (if any exist).

6. You can perform the following actions:

Action	Navigation
Add a related trade	Choose .
Delete a related trade	Select the relevant row, and then choose .
Display a related trade	In the *Display TC* column of the relevant related trade, choose .

4.2.2 Contract Amendments

Use

During the term of a contract, you can amend the contract conditions and terms. Some amendments, such as changes to pricing, do not affect the contract execution. However, other amendments, such as changes to the delivery period or the delivery period quantity, do affect the contract execution. The system validates any amendments that affect the contract execution to ensure that the existing call-offs remain valid and that there is a sufficient open quantity for the change.

Changes to tolerance schedules and discount premium quality schedules (DPQS) take effect for new contract application and contract settlement processes. Any completed applications and settlements remain unchanged. If you wish to change the completed application and settlement documents, you must reverse the relevant documents and then re-create them.

If your implementation scenario uses a third party trading system for contract capture, then amendments to contracts must be performed in the third party trading system.

The following constraints apply to contract amendments:

- If an application document exists for the contract, then you cannot change the settlement currency of the contract.
- If a call-off exists for the contract, then you cannot change the tolerance types or the optionality header and details data. However, you can add new optionality values for existing categories.
- The commodity line item quantity must always be equal to the contract item quantity.

Activities

To amend an existing contract, on the *SAP Easy Access* screen choose ▌▶ *Agricultural Contract Management* ▶ *Contract Management* ▶ *Commodity Contract* ▶ *Change* ▌.

4.2.3 Storage Agreements

Use

Storage agreements are contracts between a company and a vendor outlining the terms and conditions under which goods are stored. A storage agreement defines the following:

- Vendor: Agreements can be generic or specific. A generic agreement is public and any vendor can use it. A specific agreement is restricted to a specific counterparty and only that partner can use it.
- Materials: Agreements define which materials are valid for the agreement. The materials valid for the agreement are defined by the DPQS material schedule list.
- Plant/Storage Locations: Agreements define which plants and storage locations can use the agreement. Locations are represented as a single plant and storage location or as a TSW location hierarchy, representing several plants and storage locations.

- DPQS: Agreements are linked to a DPQS schedule that is used to calculate net weights.
- Rules: Agreements define the rules for charging a vendor for storage. The agreement also defines the number of days for which storage is free of charge, and how many days the rates for the agreement are locked (storage fees will not change for that number of days). You can also define if the agreement uses net or gross weights during settlement and if the storage start and end dates are used during settlement.
- Storage Fees: You can assign storage fees to a storage agreement and define the pricing conditions used during storage settlement.
- Storage Events: You can assign possible storage events to a storage agreement and define how events are charged during a storage settlement.

More Information

For more information about assigning storage fees to a storage agreement, see Storage Fees [page 211].

4.2.4 Cancellation

Use

During the term of a contract, you can perform a cancellation to close all or part of the open quantity on a contract. Commodity contracts specify very large contract quantities and are rarely filled exactly. Therefore, cancellations can occur for various reasons including underfills, washouts, and agreed reductions in the contract quantity.

Features

When you enter a cancellation, the system performs validation checks before saving the cancellation. The system validates the available open quantity. The system also checks the current call-offs and prepayments for the contract to ensure that the specified cancellation quantity is available.

If you cancel a quantity of an intercompany or intracompany contract, the system automatically creates the cancellation in the corresponding mirror contract.

The canceled quantity must be settled, although there is no related goods movement. Canceled quantities may be settled at a different price to the established price for the contract, and there may also be a cancellation fee. For more information, see Non-Standard Settlement [page 190].

Activities

You enter cancellations for a commodity contract on the *Cancellations* tab page for the commodity item. For more information, see Entering Cancellations [page 61].

4.2.4.1 Entering Cancellations

Context

You can cancel all or part of the open quantity on a commodity contract.

Procedure

1. On the *SAP Easy Access* screen, choose ▕▶ *Agricultural Contract Management* ❭ *Contract Management* ❭ *Commodity Contract* ❭ *Change* ❭.
2. Enter the contract number and choose *Find*.
3. Choose *Overview*.
4. Double-click the line item number in the *Item Number* column.

   The commodity item details appear.
5. Choose the *Cancellation* tab page.
6. In the *Event Information* screen area, enter the *Cancellation Type*, *Cancellation Code*, and *Cancellation Date*.
7. In the *Event Details* screen area, enter the *To be Cancelled Quantity*, the *Cancellation Fee*, and the pricing conditions.
8. Save your entries.

   Before saving the cancellation, the system performs validation checks. For example, the system checks the open quantity, call-offs, and prepayments for the contract. If the cancellation is permitted, your changes are saved, otherwise an error message is displayed.

4.2.5 Displaying Commodity Item Details

Context

From the *Commodity Items* screen area for a commodity contract, you can display the following information:

- Quantities
  You can display a breakdown of the quantity for each quantity type (for example, *Consumed Quantity*, *Available to Call-off Quantity*, *Underfill Quantity*, and so on).
- Pricing Aspects
  You can display the futures and basis condition amounts and values.

- Assignments
  You can display assignment partners, such as an order or application document, along with the assigned quantities.
- Document Flow
  You can display a detailed *Trading Solution Document Flow*, which lists all of the documents for the contract in a hierarchy. The information displayed includes the document type and number, the ID of the user who created the document, the creation date, and the document status.

Procedure

1. On the *SAP Easy Access* screen, choose ▌▶ *Agricultural Contract Management* ❯ *Contract Management* ❯ *Commodity Contract* ❯ *Display* ◀▐.

2. Enter the number of the relevant trading contract and choose *Find*.

   The trading contract screen appears.

3. Choose *Overview*.

4. On the *Item Overview* tab page, in the *Commodity Items* column, choose 🔲.

   The *Commodity Items* screen area appears.

5. Select the commodity item, and then choose the relevant option as follows:

Action	Navigation
Display Quantities	📇
Display Pricing Aspects	📂
Display Assignments	To display the assignments, choose 📥, then select an item and choose 📂.
Display Document Flow	🗐

5   Integration with SAP Commodity Management

Use

SAP Agricultural Contract Management (ACM) is integrated with SAP Commodity Management (CM). This integration enables the user to use various CM functions for the commodities processed based on the ACM scenarios.

Integration

To enable the ACM-CM integration, the business function `/ACCGO/BF_ACMCM_INT` (switch `/ACCGO/ SWITCH_ACM_CM`) needs to be activated.

More Information

- Commodity Pricing Engine [page 63]
- Exposure Management [page 71]

5.1   Commodity Pricing Engine

Use

Commodity Pricing Engine (CPE) is a tool for calculating the prices of commodities. It retrieves pricing formulas in business documents and evaluates them to calculate final prices of commodities. The resulting price is then transferred to the condition types that are used in commodity pricing.

CPE enhances pricing by using complex rules to calculate a condition rate and a condition value. These rules define how market data from exchanges or other providers are considered.

When a contract is created, pricing must be established for a portion of a line item quantity or for multiple components. Pricing is not required to be established to save a contract or to initiate logistics against a contract. For more information, see Provisional Pricing [page 69].

The pricing components include the pricing conditions and the CPE terms. The system can be configured to establish pricing in various combinations of futures and basis prices. For more information, see Pricing Approach [page 68].

Features

- **Pricing Views**
  This feature offers a new view along with the standard CPE views, which helps you to create price, set price, and visualize price in a single screen. For more information, see ACM Pricing View [page 65].
- **Pricing Statuses**
  If either the basis or the futures price is not established, then the price is only partially defined. If some portion of a price has not been established for a component or a quantity, you can use provisional pricing. For more information, see Pricing Status [page 68] and Provisional Pricing [page 69].
- **De-pricing**
  When you de-price a commodity, you temporarily remove the pricing of CPE condition quantity and later reprice that same component with different values. Such price changes can occur at any point until final settlement because during final settlement, the pricing aspect is locked. In the *ACM Pricing View*, de-pricing is referred to as lifting the price.

More Information

5.1.1 Uses of Pricing

Use

Pricing is established for a contract at the time of contract creation. The system retrieves this pricing to make the final settlement between the counter parties. If there is no pricing defined for a quantity on the lot, the system determines a provisional price for that portion of the quantity to settle a contract provisionally. You cannot make the final settlement unless all the pricing components are defined.

Prerequisites

You have used the *ACM Pricing View* where the market price is retrieved.

Features

- **Provisional Settlement**
  When no pricing is established on a contract, the system determines a provisional price for the contract using the CPE view. The contract is provisionally settled using this price. For more information, see Settlement Pricing [page 170].
- **Final Settlement**
  When contracts are fully priced, a final settlement is done. For contracts that are partially priced, you can maintain the pricing on the contract to make it fully priced, which can be finally settled. Otherwise, it is only a provisional settlement.

5.1.2 ACM Pricing View

Definition

This feature offers an ACM-specific view in addition to the standard CPE views, enabling you to set and visualize price fixations on one screen, and manage pricing operations efficiently.

Structure

This tool offers a set of standard pricing views:

- *Pricing Elements: Table*
- *Pricing Elements: Tree*
- *CPE Formulae and Terms*
- *With Adjusted Quantities*

Additionally, an *ACM Pricing View* is available to fulfill the agricultural market requirements:

- *ACM Pricing View*

To access the *ACM Pricing View*, navigate to the *Conditions* tab in the contract, where the following fields help you create a new pricing fixation:

- *View*: Select the required view from the dropdown list.
- *Quantity*: Specify the contract quantity for the line item.
- *Net*: View the net amount, which is calculated based on the price that was set in the condition types considering provisional prices and fixed prices.
- *Error Log*: Choose this button to open a dialog box and view information about errors related to the *Conditions* tab, pricing procedure, determination of pricing, or any missing Customizing for CPE.
- *Pricing Approach*: Displays the available pricing approaches for this contract, as specified in Customizing. The pricing approach that applies to this contract is determined by pricing conditions. You can specify the valuation point on the *Valuation Data* tab and it can also be used in the standard condition determination process. This field is display only. For more information, see Pricing Approach [page 68].
- *Price a Quantity*: Choose this button to display a dialog box in which you can set price fixations and foreign exchange rates for each pricing component in a contract line item.

The available fields in this dialog box are displayed dynamically, depending on the pricing approach that has been set for this line item. For example, if a flat pricing approach has been specified, the futures and basis pricing components are calculated automatically, but if a componentized approach such as futures and basis has been specified, you price the components separately.

More Information

5.1.2.1   Foreign Exchange Rates in ACM Pricing

Use

Pricing in ACM supports multiple currencies per trading scenario, including company code currency, market currency from CPE, and contract currency. You can price the futures and basis components of a price in different market currencies. You can set a foreign exchange (FX) rate for each pricing component before, during, or after pricing the component itself.

If your trading scenario involves multiple currencies, you must fix an FX rate for all pricing components before you can carry out final settlement.

Features

You can carry out the following tasks during pricing:

- Fix the FX rate. This stabilizes the FX rate so that all parties to the contract can use their own currencies without inconsistencies in pricing being caused by fluctuating FX rates.
- Lift the FX rate or fix a new FX rate for the entire quantity of a contract line item, or for partial quantities.
- View a provisional FX rate. This FX rate is retrieved directly from the market by CPE.

5.1.3 Pricing Condition Types

Use

A condition type is a representation in the system of some aspect of your daily pricing activities. You can define a different condition type for each kind of price that occurs in your business transactions, such as futures and basis pricing components.

> **i Note**
>
> To ensure consistent pricing in ACM and Commodity Management, you must maintain a mapping between CPE condition types and pricing aspect conditions. You do this in Customizing for *Agricultural Contract Management* under ▶ *ACM-CM Integration* ❭ *Map CPE Condition Types to Pricing Lot Condition Types* ❭

Example

You configure the following pricing condition types and map them to pricing lot condition types in Customizing:

- **`ZAW0: Price Futures`**
- **`ZAW1: Price Basis`**
- **`ZAWP: Basis Port Spread`**

5.1.3.1 Pricing Types

Use

You can configure the system to establish the pricing of a contract. For example, it can be futures and ratio, or index and ratio. You can perform final settlement on a contract only when some pricing components are defined.

With or without these prices, the following pricing types are derived:

- *Fully priced*: when both futures price and basis price are established
- *Partially priced*: when no futures price is established or when no basis price is established, which means only one pricing component is established
- *Not priced*: when no pricing is established

Features

The system retrieves the provisional price for a quantity based on the pricing type, whether it is *Not priced* or *Partially priced*.

5.1.4 Pricing Approach

Use

You can configure the system to establish the pricing approach of a contract. The pricing approach can encompass various combinations of futures components, basis components, indexes, and ratios. You can also simply use a flat pricing approach.

You can perform final settlement on a contract only when you have priced all the components that are specified in the pricing approach. For example, if your pricing approach is futures and basis, you cannot perform final settlement on a contract until you have specified a futures price and a basis price for each contract line item, and, if you are working with multiple currencies, an exchange rate.

Prerequisites

You have set up valuation points. For more information, see Valuation Point [page 44].

More Information

On the *SAP Easy Access* screen, choose ❙▶ *Agricultural Contract Management* ❱ *Master Data* ❱ *Maintain Pricing Approach* ❱.

5.1.5 Pricing Status

The system derives one of the following pricing statuses for each line item:

- *No price established (NPE)*
  Neither the futures component nor the basis component of the commodity price is established. For goods that do not have a componentized pricing approach, the pricing is not established.

  > **i** Note
  >
  > If you want to delete a price fixation in the *ACM Pricing View*, its status must be *NPE*.

- *No futures established (NFE)*
  Only the basis component is priced. The price of the futures component is not yet established.
- *No basis established (NBE)*
  Only the futures component is priced. The price of the basis component is not yet established.
- *Flat*
  All components are fully priced.

5.1.6 Provisional Pricing

Use

Provisional pricing is defined for a commodity when no pricing is established for a contract quantity. In such cases, final settlement is not permitted.

Provisional price is substituted for those components and quantities for which there is no pricing in the contract. This substitution does not affect the existing pricing lot distributions. Provisional pricing is retrieved for the portion of the quantity that is not priced in a price fixation in CPE.

Once you assign the missing price, you can carry out final settlement of the contract.

Provisional pricing is retrieved directly from the market using the CPE.

Prerequisites

You have maintained commodity curves in CPE, in order to retrieve accurate provisional prices.

Features

With CPE, the system permits the usage of different DCS (Derivative Contract Specification)-based commodity curves that leverage market prices in CPE and, as a result, for provisional price in settlement.

More Information

5.1.6.1 Determination of Provisional Pricing

Use

You use provisional pricing to determine pricing for the portion of the quantity that has no pricing established. The system fetches the input from the market price using the CPE view and then determines the provisional pricing.

Prerequisites

You have priced using *ACM Pricing View* where the market price is retrieved.

Activities

- You search for the relevant inputs in the *ACM Pricing View* to determine provisional pricing.
- The system uses the decision tables to determine the futures price, basis price, location adjustment price, and material adjustment prices.

5.1.6.2 Calculation of Provisional Pricing

Use

You use this function to calculate provisional pricing [page 69] when the contract is partially priced or is not priced.

Prerequisites

You have used the *ACM Pricing View* where the market price is retrieved.

Activities

Based on the pricing types in a contract, the system calculates the provisional pricing differently as shown in the following expressions:

- When the futures and basis prices are both determined:
  ```
  Provisional price = (futures price + basis price) * load quantity
  ```
- When you want to use location and material adjustment prices:
  ```
  Provisional price = (futures price + basis price + location adjustment price +
  material adjustment price) * load quantity
  ```

Example

For no pricing established contracts, if `futures price = 3 USD per LB`, `basis price = 2 USD per LB`, and `load quantity = 100 LB`, then the price calculation is as follows:

`Total calculated provisional price = (3 + 2) * 100 = 500 USD and 5 USD per LB`

5.1.7 Pricing Distribution

Use

The pricing lots are distributed to the load based on the pricing distribution rules maintained in the Business Rules Framework (BRFplus). For the final shipment settlement process, the pricing lots that are already distributed to other loads can be undistributed and redistributed to the application document line or subline that is settled.

Prerequisites

You have defined the rules for pricing distribution in BRFplus.

Activities

- If there is only one priced lot on the contract and its quantity is greater than the load quantity, the system uses the contract price for settlement.
- If there are multiple pricing lots, the system calculates the pricing for the load based on the distribution rules established in BRFplus.

5.2   Exposure Management

Use

In agricultural market risk management, exposure includes all future payments from a financial position, depending on the risk factors that affect the various types of produce.

Companies that trade agricultural commodities must constantly evaluate the financial risks associated with their commodity positions. In addition, they require a 'physical risk position' view that is more detailed than the pure financial risk view. These evaluations are typically conducted through reporting and ad hoc monitoring of the positions.

More Information

5.2.1 Creation of Raw Exposures

Use

Exposures are created whenever an application document is assigned or reassigned to a contract. An application document can be assigned to more than one contract. By using Commodity Pricing Engine (CPE), exposure creation is automatically triggered by SAP Global Trade Management (GTM) contract per GTM-CM integration default.

The standard position report utilizes raw exposures. Hence, *SAP Agricultural Contract Management* (ACM) processes exposure information at necessary points in the lifecycle of scenarios. This information includes updating raw exposures when the documents are altered.

> **i** Note
>
> No updates are made to the existing exposures; every time a contract is assigned, the contract exposure is re-created to represent the new scenario generating a new version of the same exposure.

Features

The following modes are available for creating raw exposures:

- *Automatic Mode*
  Automatic Mode is also known as *Real Time Mode*. In this mode exposures are created automatically during the various ACM scenarios by the system itself.
- *Manual Mode*
  Manual Mode is used only when exposures are not created in automatic or real time mode. For example, when the real time creation of raw exposure fails due to any reason (for example, object lock, missing Customizing data and so on), the user can correct the error and regenerate the raw exposure using the report *Reconciliation of Exposures*.
  You can call up this report using the transaction `/ACCGO/EXP_RECONCIL` and regenerate Application and Correction Stock exposures manually.
  For GTM contract exposures, you can use the standard transaction `LITRMS`.

> **i** Note
>
> The modes are not mutually exclusive and can be used in tandem.

Activities

You can create or check the various exposures in one of the following ways:

- Use transaction `FTREX_LG1`, which calls up *Display Log for Logistics Integration*, to see the details of the newly created raw exposures once you create and save a contract, or
- Use transaction `FTREX1`, which calls up *Raw Exposure Maintenance*, to check the raw exposure document that was created. Enter the *Raw Exposure ID* in the *Raw Exposures: Initial Screen*. In this transaction, you can see the raw exposure line items for each type of pricing. You can also see the sub raw exposure items and whether they are 🔒 or 🔓, or
- Use transaction `RSRT` to check the raw exposure by entering a query in the *Query Monitor*.

5.2.2 Exposures Lifecycle

Use

The exposure lifecycle specifies the sequence in which the raw exposures are created. The lifecycle represents the development of a risk within the business process. Several relevant raw exposures are created at different points of the lifecycle.

Features

Following are the different types of exposures created during the lifecycle:

- **Trading Contract Exposure**
  Trading contract exposures are created by the standard GTM integration. A contract exposure is created when a contract is created and posted.

  > **i Note**
  >
  > No updates are made to existing exposures; every time a contract is assigned, the contract exposure is re-created to represent the new scenario, generating a new version of the same raw exposure.

- **Application Exposure**
  Application exposures are created whenever an application document is assigned or reassigned to a contract. An application document can be assigned to more than one contract. It reflects the quantity you receive as the logistically adjusted quantity (LAQ). The LAQ becomes the relevant risk quantity presented in the application exposure.
  Application document reversal makes the correct adjustments to all exposures, reflecting the reversal of a specific process within the system. If an application document is reversed, its application exposure quantities must be zero. You must reverse the quantities to the contract, and adjust stock correction exposures to offset the stock exposure fully.
  After revenue recognition of a sales or purchase cargo, the application exposure must change to a new invoicing status. This status change is needed because until revenue recognition is done, application exposure quantities offset book inventory quantities in the position report. After this status change, the

position report no longer considers the application exposure quantities, which are then reported as book inventory.

- **Material Stock Exposure**
  Material Stock exposure is created whenever a goods movement (GR or GI) is posted in the system. Stock exposures are created automatically during OF execution. In case a goods movement is cancelled (for example, transaction `MSBST`), material stock exposure is reverted simultaneously.

- **Material Stock Adjustment Exposure**
  Whenever there is a discrepancy between LAQ and delivered quantity (GR or GI quantity), besides material stock exposure creation, there is a stock adjustment exposure which represents the residual quantity due to DPQS adjustments.

Example

A third party purchase scenario has the following data:

- Goods Receipt quantity: 100 TO
- LAQ quantity: 95 TO

Therefore, in terms of risk exposures, the following is expected:

- Material Stock exposure: 100 TO
- Application exposure: 95 TO
- Correction stock exposure: 5 TO

Stock exposures, corrected by stock adjustment exposures, represent the book inventory quantities in the position report. A book inventory quantity represents a quantity that is no longer associated with a risk in the contract. When application documents are reversed, it triggers the application exposure reversal fully offsetting the stock adjustment exposure.

5.2.3 Risk Reporting

Use

Companies that trade agricultural commodities must constantly evaluate the financial risks associated with their commodity positions. In addition, they require a 'physical risk position' view that is more detailed than the pure financial risk view. These evaluations are typically conducted through reporting and ad hoc monitoring of the positions.

This risk assessment is possible in ACM scenarios with ACM and CM (Commodity Management) integration.

A risk report (or position report) displays commodity quantities that represent a risk for the company. To display the correct quantities in the risk report, the risk relevant processes trigger exposure creation accurately and with precise timing. By using CPE, exposure creation is automatically triggered by GTM contract per GTM-CM integration default.

Risk reporting must fulfill the following tasks:

- Provide a risk view on the financial (commodity price) risk associated with the pricing of physical contracts or positions (for example, stock) and financial contracts that are taken to offset these price risks.

- Provide a position view on physical short and long positions from contracts and stocks required for trading companies to run their trading business. Such a view is also relevant for non-trading companies to match their purchase and stock positions to their requirements regarding locations and quality.

The risk is described in terms of priced and unpriced and hedged and unhedged quantities, by consolidating a view of physical trades and paper trades in a certain time frame.

You use the *Query Monitor* to view the risk report.

Features

The following risk reports are available for ACM.

- Price Type Report [page 77]
- Premium Report [page 77]
- Slate Report [page 78]

More Information

Running a Risk Report [page 75]

5.2.3.1 Running Risk Reports

Use

You can run a risk report to see the various exposures and their values created during the lifecycle.

Procedure

To run the risk report:

1. Go to transaction `RSRT`.
2. Enter the *Query* and *Query Display*, and then choose *Execute*.
   The following queries are available for ACM reporting:

Query	Description
2OOCFM_CTY_EXP//ACCGO/ACM_QUERY	Template for ACM-relevant Risk Reporting

Query	Description
2OOCFM_CTY_EXP//ACCGO/ACM_PRICE_TYPE_310	ACM Price Type Report
2OOCFM_CTY_EXP//ACCGO/ACM_PREMIUM_RPT_310	ACM Premium Report
2OOCFM_CTY_EXP//ACCGO/ACM_SLATE_REPORT_310	ACM Slate Report

> **i Note**
>
> The queries in the table above are relevant for SAP Agricultural Contract Management 3.0 SP01 and all subsequent releases.

3. On the next screen, enter the required details such as *Commodity ID*, and so on, and then choose *Execute* to run the risk report.
   You can hide, display, filter, or drill down the various columns and rows. You can also filter each exposure individually.

Result

The `2OOCFM_CTY_EXP//ACCGO/ACM_QUERY` risk report shows the following results:

- *Priced Contracts physicals*: contract exposures that are fixed
- *Unpriced contracts*: contract exposures that are floating
- *Application priced*: application exposures that are fixed
- *Application unpriced*: application exposures that are floating
- *Application invoiced (realized)*: application exposures that were already set as *Finally Invoiced*, Purchase realization or Revenue recognition already occurred
- *Inventory*: material stock exposure
- *Correction stock exposure quantity*: correction stock exposure for material, plant, or storage location
- *Book inventory*: the physical net inventory based on adjustments due to quality characteristics, considering realized transactions.
  It is calculated using the formula: `BI = M - A - C`
  `BI` - Book inventory
  `M` - Material stock exposure quantity
  `A` - Collection of application exposures not yet realized
  `C` - Correction stock exposure quantity.

The price type report, premium report, and slate report show additional fields.

More Information

- Price Type Report [page 77]
- Premium Report [page 77]

5.2.3.2   Price Type Report

Use

You can use this report to view all key figures for the price fixation statuses *FLAT*, *NFE*, *NPE*, and *NBE*. It is based on market pricing conditions.

Features

This report displays the following key figures:

- *Open Contract*
  This key figure shows the quantity used in contract creation as the contract exposure.
- *Inventory on Unrealized Transactions*
  After application document creation, the *Open Contract* exposure reduces and an application exposure is created. The application exposure is displayed in this key figure.
- *Inventory on Realized Transactions*
  Once revenue recognition has been carried out for the application document, book inventory is displayed in this key figure. Book inventory is calculated as described in Running Risk Reports [page 75].

5.2.3.3   Premium Report

Use

You can use this report to view a subset of the data shown in the price type report.

Features

This report shows the same key figures as the price type report, but only for the price fixation statuses *FLAT* and *NFE*. This report is based on basis market conditions.

This report displays the following key figures:

- *Inventory*
  Book inventory, calculated as described in Running Risk Reports [page 75].
- *Contract Exposure on Application Document NFE*
  NFE application document

- *Contract Exposure on Application Document FLAT*
  FLAT application document
- *Unapplied FLAT Contract*
  Open FLAT contract
- *Unapplied NFE Contract*
  Open NFE contract

5.2.3.4 Slate Report

Use

You can use this report to view the exposure data for inventory, contract, and futures trades.

Features

This report is based on basis market conditions and contract conditions. It displays the implied futures trade quantity in the key figures *Unpriced NFE Purchase* and *Unpriced NFE Sales*.

This report displays the following key figures:

- *Inventory & Contracts*
  Book inventory, calculated as described in Running Risk Reports [page 75], and open contracts
- *Less NPE*
  NPE contracts
- *Unpriced NFE Purchase*
  NFE Purchase Contract
- *Unpriced NFE Sales*
  NFE Sales Contract
- *Future Contract*
  Financial trading contract

5.2.4 Risk Profiles

Use

You can assign risk profiles in Customizing to specific combinations of company codes and physical commodities. These risk profiles are then available for use when you are creating raw exposures for these particular combinations.

In addition to the standard risk profiles available in Customizing, you can also assign the ACM risk profile 999 to combinations of company codes and commodities. This risk profile is evaluated by the system during the creation of raw exposures. Risk reporting for ACM is carried out based on this risk profile.

More Information

- Customizing for *Financial Supply Chain Management* under ▶ *Treasury and Risk Management* ▶ *Transaction Manager* ▶ *General Settings* ▶ *Exposure Management 2.0* ▶ *Reporting of Commodity Price Exposures* ▶ *Risk Profiles for Commodity Price Exposures* ▶ *Assign Risk Profiles for Commodity Price Exposures* ▶ .
-
-

5.2.5 Net Dry

Net Dry BAdI

Use

You can use the net dry business add-in (BAdI) to define customer-specific quantities for ACM-related exposures.

In a stock correction exposure, for example, you can define and use the following:

- Gross quantity instead of logistics adjusted quantity (LAQ)
- Average of all LAQ weight or analysis versions

Technical Information

BAdI Definition: **/ACCGO/EXP_BADI_CUSTOM_QTY** (Customer-defined Exposure Quantity)

This BAdI contains the following interface methods:

Method	Description
DEFINE_FOR_OFFSET_STOCKCOR_EXP	Defines custom quantity for offset stock correction exposure
DEFINE_FOR_OFFSET_IN_TRANSIT	Defines custom quantity for offset in transit exposure
DEFINE_FOR_STOCK_CORRECT_EXP	Defines custom quantity for stock correction exposure
DEFINE_FOR_APPLICATION_EXPOS	Defines custom quantity for application exposure
DEFINE_FOR_STOCK_CORR_OBLG_EXP	Defines custom quantity for stock corr OBLIGATIONS exposure

Method	Description
DEFINE_FOR_OFFSET_STOCORR_ONLY	For stock correction only exposure, such as exposure
DEFINE_FOR_MATERIAL_LOAD	For material load, such as running MATREX transaction

More Information

- This BAdI is available in the enhancement spot **/ACCGO/EXP_ES_CUSTOM_QTY**.
- This BAdI uses the interface **/ACCGO/IF_EXP_CUSTOM_QTY_BADI**.
  For more information, display the interface in the *Class Builder* (Transaction **SE24**).
- For more information about implementing BAdIs as part of the enhancement framework, see SAP Library for SAP NetWeaver Platform on SAP Help Portal at http://help.sap.com/nw_platform. Choose a release and then *Application Help*. In SAP Library, choose ▶ *SAP NetWeaver Library: Function-Oriented View* ❯ *Application Server* ❯ *Application Server ABAP* ❯ *Application Development on AS ABAP* ❯ *ABAP Customer* ❯ *Development* ❯ *Enhancement Framework* ❯.

6   Expense Management

Use

Expense Management provides you with a range of features that enable you to manage the costs associated with a commodity trade. As well as providing you with the functionality to handle various kinds of costs and commissions incurred by a trading business, Expense Management allows you to automatically accrue planned expenses, link service contracts to planned expenses, and route invoices to the relevant expense interface.

For more information, see SAP Library for SAP ERP on SAP Help Portal at http://help.sap.com/erp . Choose *SAP ERP Central Component*. Under *Application Help*, open SAP Library and choose ▶ *SAP ERP Central Component* ▶ *Logistics* ▶ *Global Trade Management* ▶ *Trading Expenses* ▶

Integration

Expenses defined at pricing contract level flow down in the contract execution process so that they are copied to all follow-on documents and can be settled at a later time. In order to achieve consistency in the system and to ensure that expenses are accrued and settled in the right places, the *Expense Management* component is integrated with the following components:

Call-Offs

Expenses are copied from the pricing trading contract to the logistics trading contract during the call-off process.

For more information, see Call-Offs [page 92].

Contract Application

Planned expenses on existing logistics documents are accrued during contract application.

For more information, see Contract Application [page 119].

Contract Settlement

Recoverable expenses (accrued and settled VBDs) are retrieved from an application item. These expenses are then settled in the *Contract Settlement* component. An ABD is created after settlement approval which includes the expense amount in its net value calculation.

The expense VBDs, for which the *Recover via CAS* checkbox is selected, are retrieved from the *Contract Settlement* component, and settled in *Settlement Workcenter*.

For more information, see Contract Settlement [page 165] and the Settlement Workcenter [page 178].

Revenue Recognition

Expenses are recognized and picked-up during the revenue recognition process. The expenses are then copied to the accrued and settled vendor billing document (VBD).

For more information, see Revenue Recognition Processor [page 208]

Features

- Link Service Contract to Planned Expenses
  The system can retrieve the latest expense rate based on the service contract by linking service contracts to planned expenses.
  For more information, see Link Service Contract to Planned Expenses [page 82].
- Invoice router
  The invoice router ensures that based on your input parameters, you are guided to the correct expense interface, either MIRO or standard GTM.
  For more information, see Invoice Router [page 84].
- Automatic Accrual of Expenses during Contract Execution
  Planned expenses can be automatically accrued at any stage of the contract execution process, for example, at the time of delivery or goods movement.
  For more information, see Automatic Accrual of Expenses during Contract Execution [page 85].
- Document Flow
  Document flow gives you an overview of how far a commercial transaction has progressed as well as the follow-on documents related to the transaction.
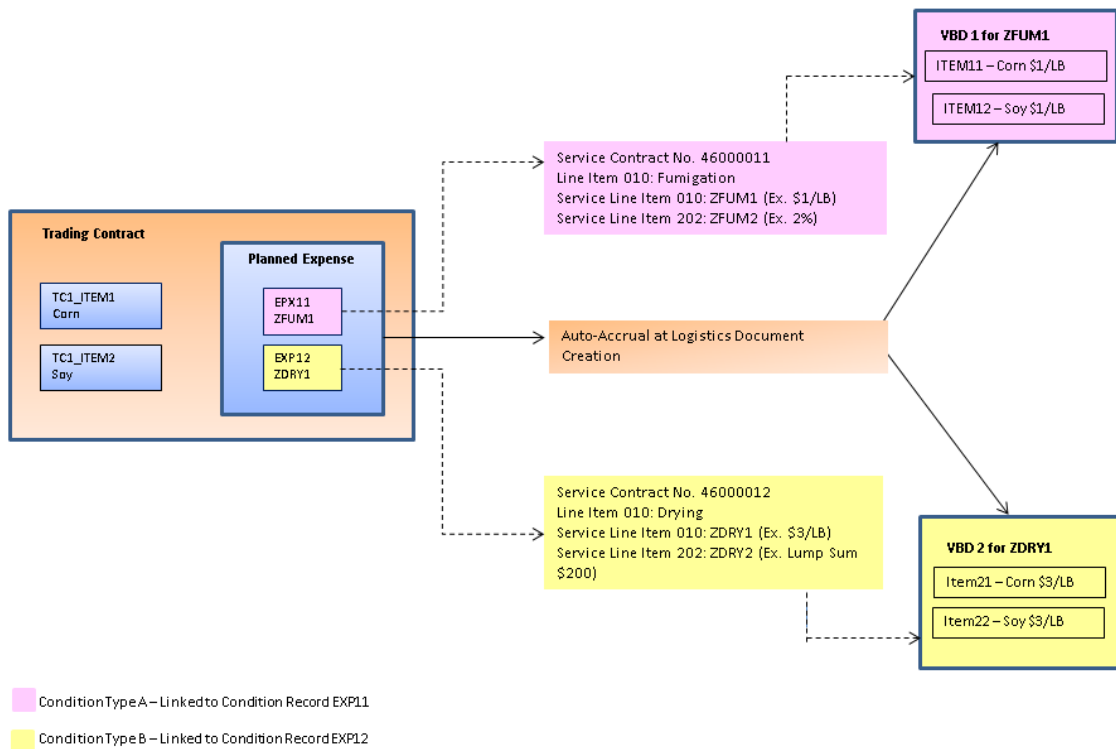 For more information, see Document Flow [page 86]

6.1 Link Service Contract to Planned Expenses

Use

The system can retrieve the latest expense rate based on the service contract by linking service contracts to planned expenses.

When service contracts are linked to planned expenses you can get the best estimated cost of an expense. For every expense class, you can maintain the service contract number and expense rate so that whenever expenses corresponding to the expense class are entered in the service contract, the latest rates are picked up automatically by the system, thereby eliminating the need to manually check for the latest rates.

Linking a service contract to planned expenses also helps to enforce contract compliance. The system overwrites any existing expense rate entries in the service contract, and updates it to the service contract rate existing at the time the expense is created.

Trading Contract

TC1_ITEM1
Corn

TC1_ITEM2
Soy

Planned Expense

EPX11
ZFUM1

EXP12
ZDRY1

Service Contract No. 46000011
Line Item 010: Fumigation
Service Line Item 010: ZFUM1 (Ex. $1/LB)
Service Line Item 202: ZFUM2 (Ex. 2%)

Auto-Accrual at Logistics Document
Creation

Service Contract No. 46000012
Line Item 010: Drying
Service Line Item 010: ZDRY1 (Ex. $3/LB)
Service Line Item 202: ZDRY2 (Ex. Lump Sum
$200)

VBD 1 for ZFUM1

ITEM11 – Corn $1/LB

ITEM12 – Soy $1/LB

VBD 2 for ZDRY1

Item21 – Corn $3/LB

Item22 – Soy $3/LB

Condition Type A – Linked to Condition Record EXP11

Condition Type B – Linked to Condition Record EXP12

The figure above describes how a combination of service contracts, service items, and service contract line items provide an expense rate for a service negotiated with a service provider. Service contracts are usually negotiated on an annual basis with the service provider.

Service contract data is determined during each of the following steps of expense execution:

- Creation of planned expenses in the pricing trading contract
- Change of planned expenses in the pricing trading contract
- Creation of logistic trading contract (LTC) which copies the pricing trading contract (PTC) expenses to the LTC
- Automatic or manual accrual of planned expenses
- Settlement of planned expenses

Prerequisites

You have maintained the condition types that correspond to expenses. On the *SAP Easy Access* screen, choose

▌▶ *Agricultural Contract Management* ❯ *Expense Management* ❯ *Service Contract Determination for Expenses* ❯

> **ⅈ Note**
>
> If you want to recreate the service contract information at any point after the expenses are entered at
> pricing contract level, you must make some changes to the auto accrual rules. On the *SAP Easy Access*

> screen, choose ▎▶ *Agricultural Contract Management* ❯ *Expense Management* ❯ *Maintain Auto Accrual Rules* ◗ and select the select the *Reeval* checkbox. By selecting this checkbox, you ensure that the service contract information is reevaluated for the expense class.

6.2   Invoice Router

Use

The invoice router acts as a single gateway for handling both trade-relevant expenses and non-trade-relevant expenses. The invoice router decides, on the basis of your input parameters, whether an expense is trade-related or non-trade-related, and routes you to the relevant interface (either MIRO in the case of non-trade relevant expenses, or GTM in the case of trade-relevant expenses).

The invoice router also displays the following information for trade relevant expenses:

- Accrued VBDs to be settled and their corresponding item details
- Pricing trading contracts and logistic trading contracts related to the accrued VBDs and their logistic documents
- VBDs related to the invoice reference number that were settled using the invoice

Prerequisites

You have activated the *Determine Transaction to be Called* BAdI in Customizing for *Agricultural Contract Management* under ▎▶ *Enhancements Using Business Add-Ins* ❯ *Expense Management* ❯ *Invoice Router* ◗

Example

1. On the *SAP Easy Access* screen, choose ▎▶ *Expense Management* ❯ *Invoice Router* ◗
2. Enter the relevant details choose the Execute icon.
   If you enter non-trade information, you are brought to the MIRO interface where you can settle the expense. If you enter trade relevant information, you are brought to the GTM invoice router interface. From the GTM invoice router screen, you can settle the expense in the following ways:
   - *Settle With GTM*
   - *Settle With The Expense Workbench*

More Information

For more information, see SAP Library for SAP ERP on SAP Help Portal at http://help.sap.com/erp ➚. Choose SAP ERP Central Component. Under *Application Help*, open SAP Library and choose ▎▶ *SAP ERP Central*

6.3　Automatic Accrual of Expenses during Contract Execution

Use

Expense Management offers the following two ways to accrue an expense:

- Manually - through the initiation of an expense accrual on demand
- Automatically - through the initiation of an expense accrual based on the generation of a logistics document

You can automatically accrue expenses that are available in the global trade management (GTM) contract. You can choose which type of expenses to accrue, and at what point of the contract execution process (for example, at the time of delivery or goods movement), to accrue these expenses. You accrue an expense based on the following attributes:

- Company Code
- Plant
- Material Number
- Mode of Transport
- Expense Class
- Document Type (delivery, goods receipt , goods issue)

Prerequisites

You have maintained the rules for the automatic accrual of expenses in Customizing for *Agricultural Contract Management* under ❯ *Expense Management* ❯ *Maintain Auto Accrual Rules* ❯

Activities

In the *Planned Expenses* tab of the trading contract, you plan your expenses. During call-off, the planned expenses are copied to the call-off ticket. You have already maintained the expenses you want to accrue automatically for follow-on documents in Customizing, so when a trading contract is maintained with those same expenses, they will automatically be accrued.

6.4   Document Flow

Use

Document flow gives you an overview of how far a commercial transaction has progressed as well as the follow-on documents related to the transaction. Depending on where you choose to view the document flow from, the system displays all preceding and follow-on documents on the document flow screen. From the *Document Flow* screen you have the following options:

- *Display Document* - you can select any document in the document flow tree and view the document details and the current status of the document
- *Display Document Flow* - you can select any node in the document flow tree and view the document flow of related documents
- *Assignment Network Flow* - you can view the assignments of pricing trading contracts commodity items
- *Personal Settings* - allows you to filter the document flow tree. The following are the filter options:
    - Display Rejected/Cancelled VBDs
    - Display Recognition

The document flow tree also displays the document type and number, the ID of the user who created the document, the creation date, and the document status.

Integration

The following table shows the different documents from where you can view the document flow, how to navigate to the document flow functionality, and the documents that are displayed in the document flow tree:

Document	Document Flow	Navigation Steps
Application Document	- Pricing TC - Logistics TC - Vendor Billing Document - Sales Order - Call-Off Ticket - Application Document - Outbound Delivery Document - Goods Issue Document - Settlement Document - Washout TC - Billing Document - Expense Accrual - Expense Settlement - Revenue Recognition	1. From the *SAP Easy Access* menu, choose ▶ *Agricultural Contract Management* ❯ *Contract Application* ❯ *Maintain Application Document* ❯. 2. Choose *Display*. 3. Enter the application document number and choose 🕐. 4. Choose the *Items* tab. 5. In the *Master Item* table, select an item, and choose 🗇.

Sales Order	• Pricing TC • Logistics TC • Vendor Billing Document • Sales Order • Call-Off Ticket • Application Document • Outbound Delivery Document • Goods Issue Document • Settlement Document • Washout TC • Expense Accrual • Expense Settlement • Revenue Recognition	1. From the *SAP Easy Access* menu, choose ▌ *Logistics* ❯ *Sales and Distribution* ❯ *Sales* ❯ *Order* ▐ . 2. Choose *Display*. 3. Enter the sales order number and press **Enter**. 4. Select an item from the sales order overview window and choose 🔍. 5. Choose the *Global Trade Management* tab. 6. Choose the *Document Flow* tab. 7. Choose 🗗.
Purchase Order	• Pricing TC • Logistics TC • Vendor Billing Document • Purchase Order • Call-Off Ticket • Application Document • Inbound Delivery Document • Goods Receipt Document • Settlement Document • Washout TC • Invoice • Expense Accrual • Expense Settlement • Revenue Recognition	1. From the *SAP Easy Access* menu, choose ▌ *Logistics* ❯ *Materials Management* ❯ *Purchasing* ❯ *Purchase Order* ▐ . 2. Choose *Display*. 3. Choose 🗗. 4. Select an item from the purchase order overview window and choose 🖥. 5. Choose the *Global Trade Management* tab. 6. Choose the *Document Flow* tab. 7. Choose 🗗.
Outbound Delivery Document	• Pricing TC • Logistics TC • Vendor Billing Document • Sales Order • Call-Off Ticket • Application Document • Outbound Delivery Document • Goods Issue Document • Settlement Document • Washout TC • Billing Document • Expense Accrual • Expense Settlement • Revenue Recognition	1. From the *SAP Easy Access* menu, choose ▌ *Logistics* ❯ *Logistics Execution* ❯ *Outbound Process* ❯ *Goods Issue for Outbound Delivery* ❯ *Outbound Delivery* ▐ . 2. Choose *Display*. 3. Enter the outbound delivery document number and press **Enter**. 4. On the *Item Overview* tab, select an item and choose 🖥. 5. Choose the *Global Trade Management* tab. 6. Choose the *Document Flow* tab. 7. Choose 🗗.

| Inbound Delivery Document | • Pricing TC
• Logistics TC
• Vendor Billing Document
• Purchase Order
• Application Document
• Inbound Delivery Document
• Goods Receipt Document
• Settlement Document
• Invoice
• Expense Accrual
• Expense Settlement
• Revenue Recognition | 1. From the *SAP Easy Access* menu, choose ▌ *Logistics* ❭ *Logistics Execution* ❭ *Inbound Process* ❭ *Goods Receipt for Inbound Delivery* ❭ *Inbound Delivery* ❭ *Display* ❭.
2. Choose *Single Document*.
3. Enter the inbound delivery document number and press **Enter**.
4. On the *Item Overview* tab, select an item and choose 🔳.
5. Choose the *Global Trade Management* tab.
6. Choose the *Document Flow* tab.
7. Choose 🔳. |
| Goods Issue Document | • Pricing TC
• Logistics TC
• Vendor Billing Document
• Sales Order
• Call-Off Ticket
• Application Document
• Outbound Delivery Document
• Goods Issue Document
• Settlement Document
• Washout TC
• Billing Document
• Expense Accrual
• Expense Settlement
• Revenue Recognition | 1. From the *SAP Easy Access* menu, choose ▌ *Logistics* ❭ *Materials Management* ❭ *Inventory Management* ❭ *Material Document* ❭.
2. Choose *Display*.
3. Enter the material document number and press **Enter**.
4. Select an item and choose 🔳.
5. Choose the *Global Trade Management* tab.
6. Choose the *Document Flow* tab.
7. Choose 🔳. |

Goods Receipt Document	• Pricing TC • Logistics TC • Vendor Billing Document • Purchase Order • Call-Off Ticket • Application Document • Inbound Delivery Document • Goods Receipt Document • Settlement Document • Washout TC • Expense Accrual • Expense Settlement • Revenue Recognition	1. From the *SAP Easy Access* menu, choose ▮ *Logistics* ❯ *Materials Management* ❯ *Inventory Management* ❯ *Material Document* ❯. 2. Choose *Display*. 3. Enter the material document number and press **Enter**. 4. Select an item and choose 🔍. 5. Choose the *Global Trade Management* tab. 6. Choose the *Document Flow* tab. 7. Choose 🗐.
Billing Document	• Pricing TC • Logistics TC • Vendor Billing Document • Sales Order • Call-Off Ticket • Application Document • Outbound Delivery Document • Goods Issue Document • Settlement Document • Washout TC • Billing Document • Accounting Document • Expense Accrual • Expense Settlement • Revenue Recognition	1. From the *SAP Easy Access* menu, choose ▮ *Logistics* ❯ *Sales and Distribution* ❯ *Billing* ❯ *Billing Document* ❯. 2. Choose *Display*. 3. Enter the billing document number and press **Enter**. 4. Select an item and choose 🔍. 5. Choose the *Global Trade Management* tab. 6. Choose the *Document Flow* tab. 7. Choose 🗐.

| Invoice Document | • Pricing TC
• Logistics TC
• Vendor Billing Document
• Purchase Order
• Call-Off Ticket
• Application Document
• Inbound Delivery Document
• Goods Receipt Document
• Settlement Document
• Washout TC
• Invoice
• Expense Accrual
• Expense Settlement
• Revenue Recognition | 1. From the *SAP Easy Access* menu, choose ▌ *Logistics* ❯ *Material Management* ❯ *Logistics Invoice Verification* ❯ *Further Processing* ❯.
2. Choose *Display Invoice Document*.
3. Enter the invoice document number and fiscal year and choose 🔍.
4. On the *PO Reference* tab, select *PO - Order Price Quantity* from the *Layout* dropdown menu.
5. Double click on the purchase order number.
6. Select an item and choose 🖥️.
7. Choose the *Global Trade Management* tab.
8. Choose the *Document Flow* tab.
9. Choose 📇. |
| STO Document | • Inter/Intra Purchase Pricing TC
• Call-Off Ticket
• Stock Transfer Order (STO)
• Inbound Delivery
• Goods Receipt
• Application Document
• Settlement Group (H)/Settlement Unit (I)
• Agency Billing Document
• MM Invoice
• Application Document
• Expense Accrual
• Expense Settlement
• Revenue Recognition | 1. From the *SAP Easy Access* menu, choose ▌ *Logistics* ❯ *Material Management* ❯ *Purchasing* ❯ *Purchase Order* ❯.
2. Choose *Display*.
3. From the header level section, choose the *Global Trade Management* tab.
4. Choose the *CD Doc Flow* pushbutton. |

- Mirror Sales Pricing TC
- Outbound Delivery
- Goods Issue
- Application Document
- Settlement Group (H)/Settlement Unit (I)
- Agency Billing Document
- SD Billing Document
- Expense Accrual
- Expense Settlement
- Revenue Recognition

More Information

7 Call-Off

Use

When a purchase or a sales order is created, the system generates a logistics trading contract in the background. At the time of such contract creation, a pricing TC is agreed upon in consensus with the counterparty. This pricing TC is assigned to the logistics TC during the call-off process. You can estimate whether the commodity has been fully delivered or not based on the called off quantity on a contract.

Integration

- To copy the expenses from the pricing TC to the logistics TC during call-off process, an application programming interface (API) is provided. If an expense is already present on the logistics TC, then the expense is not overwritten.
- The open quantity, which is also referred to as the available to call-off quantity, determines the maximum amount of quantity that can be washed out or canceled.
- Check the approval status of the Purchase or Sales Trading Contract as only an approved contract can be used during the call-off process. If a particular contract is not *Approved*, then a message is displayed and you will not be able to continue with the call off process. For more information on Contract Approval, refer to Approving a Commodity Contract [page 54]

Features

- You can call-off a contract in the following ways:
  - From the *Create Contract* screen. For more information, see Calling Off Contracts [page 94].
  - From the *Call-off Workcenter*. For more information, see Call-Off Workcenter [page 94].
- The modes available to call-off are automatic, proposed, and manual modes. For more information see, Call-Off Modes [page 93].

Example

If there is a contract for quantity of 1000 MT for yellow corn, a sales order is created for 50 MT, 60 MT, 90 MT on different delivery dates respectively. Then the call-off quantity is 200 MT and the open quantity is 800 MT. If the discount premium quality schedule (DPQS) values are to be applied on the first shipment and the delivered quantity is 45 MT, then the open quantity further changes to 805 MT.

More Information

7.1   Call-Off Modes

Use

During the call-off process, there are different modes by which the system generates a pricing trading contract or you can select a trading contract (TC). The modes are automatic mode, proposed mode, and manual mode.

Features

- **Automatic call-off**
  The system defaults the most preferred pricing TC for a line item on the contract.
- **Proposed call-off**
  The system generates a list of pricing TCs that are applicable to the contract. You can select one or more contracts from the list. The capability to split the line item quantity across the multiple contracts is available in this mode.
- **Manual call-off**
  If you are not satisfied with the pricing TCs generated by the system in the above two modes, you can use this mode to manually select the pricing TC. To do this, you need the contract number or the external reference number of the counterparty.

More Information

7.1.1 Calling off Contracts

Context

You can perform a call-off only from the item level of an order. Call-off cannot occur for contracts that have pre-payment data or for contracts that are on hold due to undeclared explicit optionalities.

Procedure

1. On the *SAP Access Screen* choose ▶ *Agricultural Contract Management* 〉 *Contract Management* 〉 *Commodity Contract* 〉 *Change* ◀.
2. Enter the contract number and choose *Find*.
3. Choose *Overview*.
4. Double click the number in the *Item Number* column.
5. Choose the *Call-Off* tab page.
6. Enter the required data.
7. Save your changes.

7.1.2 Call-Off Workcenter

Use

You can use this transaction to create, reverse, and reassign call-offs.

Features

- **Calling Off Contracts**
  You can create a call-off from the *SAP Easy Access* screen, by choosing ▶ *Agricultural Contract Management* 〉 *Contract Application* 〉 *Call-Off* 〉 *Call-Off Workcenter* ◀. This option allows you to create an order for the listed contracts with open quantity and perform a call-off for the same.
- **Reverse an Existing Call-Off**
  You can reverse an existing call-off for an order.
- **Reassign Invalidated Call-Off**
  Call-off is re-validated when you make changes at the order item. For example, if the item quantity is decreased and the existing call-off quantity is more than the item quantity, then the call-off is reversed.

You can view the list of all call-offs that exist on a sales or purchase order in the *Call-Off Workcenter*. If call-off exists, the status of the order is 'green' and if the call-off does not exist on the order, the status is 'red'. You can perform a call-off on those which are having 'red' status.

More Information

7.2   Reversal of Call-Off

Use

An assignment is made between the order and the pricing trading contract commodity item at the time of call-off. You may have to reverse this during contract application. In such a case, the contract application process reverses the original call-off and applies the load to a new pricing TC. It prevails under the following conditions:

- To correct the initial call-off
- No loads arrive for the pricing TC and the latter is to be canceled
- When sales or purchase order is reversed or changed
- The contract application process suggests that the load received or shipped against an order should be applied to a different contract

> i Note
>
> Goods movements are not reversed during reversal of call-off. When the call-off is reversed, no document flow is visible and no linking is available.

Prerequisites

If the call-off was initially firmed by selecting the *Firming* checkbox, you have deselected the checkbox to unfirm and to allow the reversal of call-off.

Features

Manual Reversal of Call-Off

- Allows for a new call-off to be made against a contract
- Load is treated as an unscheduled load and is either applied to the pricing TC by the contract application process or is applied to a spot contract

- Changes made on the item level of the order

8   Load Data Capture

Use

Load Data Capture is one of the key functional areas within the SAP Agricultural Management solution. It comprises the *Load Data Capture* (LDC) transaction and the Orchestration Framework [page 108] (OF) to streamline the capturing, on arrival or departure, of certain attributes of a purchased or sold load. These attributes are used to determine whether a load conforms to the requirements of the contract in a planned scenario, to select an appropriate contract to fulfill, or to generate a spot contract or unassigned load in unplanned scenarios. Load Data Capture allows users to capture weight, grade, and other logistical data for bulk shipments (both inbound and outbound) of agricultural commodity products, while the Orchestration Framework oversees the generation of follow-on documents.

Integration

- The *Load Data Capture* component is integrated with the *Contract Application* and *Contract Settlement* components.
- Check the approval status of the Trading Contract as only an approved contract can be used during the LDC creation process. If the ACM contract is not *Approved*, then a message is displayed asking you to remove the ACM contract number. For more information on Contract Approval, refer to Approving a Commodity Contract [page 54]

Features

- Captures, on arrival or departure, quality characteristics information for a purchased or sold load
- Enables the addition of custom tabs to the main LDC screen in order to capture location-specific data
- Provides fast-entry screens for changing and updating event data
- Validates the captured data and determines the applicable scenario
- Creates follow-on documents appropriate to the scenario, as well as the application document

8.1   Load Data Capture (LDC)

Use

Once a purchased load arrives, certain attributes of the load must be captured. These attributes are used to determine whether a load conforms to the quality, optionality, and tolerance requirements of the contract in a

planned business scenario, and to select an appropriate contract to fulfill or generate a spot contract in unplanned scenarios.

Integration

- Load Data Capture is integrated with the Orchestration Framework to trigger a call to a stack of functions. For more information, see the component documentation for Load Data Capture [page 97].
- Load Data Capture is integrated with the SAP application document. The application document is used to link a load quantity (captured during LDC) to a pricing contract during the application process. For more information, see the documentation for Load Data Capture: Integration with Application Document [page 107].
- Load Data Capture is integrated with the nomination,, the scheduling and communication document used in the Trader's and Scheduler's Workbench (TSW). A load can be captured using the nomination as the reference document. For more information, see the documentation for Load Data Capture: Integration with Nomination and TSW [page 106].

Features

- Enables data entry for a load through a fast entry screen
- Captures quality characteristics data for the load
- Stores multiple weights and grades characteristics for use in downstream documents such as the settlement and application documents
- Utilizes load information from external sources
- Uniquely identifies each specific load event in the system
- Captures customer-specific details for the load through the use of an Add-On Tabs Framework
- Ensures that all subsequently generated system documents will reference the load

8.1.1 Load Data Capture Workcenter

Use

The Load Data Capture (LDC) Workcenter is a repository where users can enter and update load information. Users can configure the available settings to capture inbound and outbound event data, determine material, perform various maintenance tasks for LDC objects [page 99], and trigger the Orchestration Framework [page 108] to generate follow-on logistical documents.

Prerequisites

Before using the LDC Workcenter, you must configure your settings In Customizing for Load Data Capture and the Orchestration Framework under ▌ *SAP Agricultural Contract Management* ❯ *Load Data Capture* ▌. Here,

you can define, for example, the LDC event type, the analysis type, the application instruction, and MoT-relevant attributes, so that these values can be recorded in the LDC Workcenter.

Features

The LDC Workcenter provides fast entry screens for creating and changing events and event details, transportation details, weights details, analysis details, and other general information for a load.

Activities

- **Create an LDC object**
  For more information, see Creating LDC Objects (Direct Entry) [page 100]
- **Change or modify an existing LDC object**
  For more information, see Changing LDC Objects [page 103]
- **Make an existing LDC object obsolete**
  For more information, see Making LDC Objects Obsolete [page 104]
- **Add custom-specific tabs to the LDC main screen**
  For more information, see Adding Tabs to LDC Screens [page 104]

8.1.1.1 Load Data Capture (LDC) Object

Definition

A Load Data Capture (LDC) object is a data record containing an independent set of quality information characteristics and behavior (for example, weight and analysis details) that is referenced by the system during event processing. One LDC object belongs to one delivery line item that follows the object through the life cycle of a load.

You create an LDC object to capture data for an event (that is, a load or unload event) in the Load Data Capture Workcenter. Once you have successfully created an LDC object, you can go on to perform further maintenance tasks in the workcenter, for example, changing or editing the LDC object, displaying it, or setting it to *Obsolete*.

When creating a new LDC object or editing an existing LDC object, you can choose from the following ways in which to enter data into the LDC screen:

- Direct Entry [page 100]

You use this method when entering only one weight and analysis for one LDC event.

- Fast Entry [page 101]

You use this method when entering weight/analysis vertically for one LDC event.

- Flat Entry Analysis [page 102]

You use this method when entering analysis data vertically for more than one LDC event.

- Mass-Maintenance [page 102]

You use this method when entering weight/analysis/event details for more than one LDC event, when the event data is the same across all events

Integration

In a Back-to-Back scenario, where inbound delivery creation or nomination [page 115] confirmation triggers the creation of an LDC object in the background with minimum basic information available at nomination/delivery level, this is called a 'shell' LDC object. The nomination provides a link to the 'shell' LDC object in question.

More Information

To create an LDC object for a *Regular Spot* or *Accumulate to Own* contract, see the documentation for Creating Load Data Capture Objects [page 133].

8.1.1.1.1   Creating LDC Objects (Direct Entry for Planned Contracts)

Use

This procedure details the direct entry method for creating LDC objects [page 99] in the *Load Data Capture Workcenter*.

For information about the other possible entry methods, see the documentation for the following procedures:

- Fast entry method [page 101] (used when entering weight/analysis data vertically for an event)
- Flat entry analysis method [page 102] (used when entering analysis data vertically for more than one LDC event)
- Mass-maintenance method [page 102] (used when entering weight/analysis/event details for more than one LDC event with common data)

Procedure

To create an LDC object for a planned contract using the direct entry method (that is, the method you use when entering only one weight and analysis for one LDC event), complete the following steps:

1. In the *SAP Easy Access* menu, choose ▌▶ *Agricultural Contract Management* ❯ *Load Data Capture* ❯ *Maintain LDC* ❯ Alternatively, you can enter transaction `/ACCGO/UIS_WC` to call the Load Data Capture Workcenter.

2. Choose *Create LDC Object*. In the *LDC Document Reference* screen section, enter either the contract number and item number, SO/PO number and item number, or nomination and item number. The remaining data, including the application instruction, defaults from the planned document (Exception: for contracts, you must select an entry for the *Material* field). Check the defaulted data to ensure it is correct.

3. In the *LDC General Information* screen section, enter an LDC type and event, a mode of transport, and a storage location. (Exception: if the event in question is a third party purchase TTO load event, do not enter a storage location.)

4. In the *Transportation Details* screen section, enter any transportation data as required.
In the *Additional Information* screen section, enter an event date (if different from current date. The event date controls when the LDC event occurs). Choose 🔳. Make a note of the LDC object ID.

5. Select the LDC object ID. In the *Weights Details* tab page, select the certificate category, UoM, gross weight, and any other details as necessary, and choose 🔳.

6. In the *Analysis Details* tab page, select the certificate category, analysis type, dispute status, and any other details as necessary. Save your entries. A message appears to inform you that the LDC object data has been saved successfully.

7. Release the event. To do this, click *Back*, and choose *Release LDC Event*. The object status flag turns to green, with the status *03: Released*. Choose 🔳. The event is now released to the Orchestration Framework [page 108] for further processing.

8.1.1.1.1.1 Creating LDC Objects (Fast Entry for Planned Contracts)

To create an LDC object [page 99] for a planned scenario using the fast entry method (that is, the appropriate method when entering weight/analysis data vertically for one LDC event), complete the following steps:

1. Complete steps 1 to 5 as detailed in the documentation for creating an LDC object using the direct entry [page 100] method.

2. Select the LDC object and choose 📝 for *Weights Details*. Select, from the dropdown list, the certificate category, unit of measure, gross weight, and enter any other details as necessary. Check the data, and choose 🔳.

3. Next, select the LDC object and choose 📝 for *Analysis Details*. Select, from the dropdown list, the certificate category, analysis type, dispute status, and enter any other details as necessary. Choose 🔳.

4. To release the LDC object, click *Back*. The object status flag turns to green, with the status *03: Released* . Save your entries. The object is now released to the Orchestration Framework [page 108] for further processing.

8.1.1.1.1.2 Creating LDC Objects (Flat Entry Analysis for Planned Contract)

To create an LDC object [page 99] for a planned contract using the flat entry analysis method (that is, the method you use when entering analysis data vertically for more than one LDC event), complete the following steps:

1. Complete steps 1 to 5 as detailed in the documentation for creating an LDC object using the direct entry [page 100] method.

2. Select the LDC object and choose ⬜. Select, from the dropdown list, the certificate category, dispute status, and enter any other details as necessary. (Alternatively, for multiple line entries, you can cut and paste data from a spreadsheet to the flat entry screen.) Choose 🖫.

3. To release the LDC object, click *Back*. The object status flag turns to green, with the status *03: Released* . Choose 🖫. The object is now released to the Orchestration Framework [page 108] for further processing.

8.1.1.1.1.3 Creating LDC Objects (Mass Maintenance for Planned Contracts)

To create an LDC object [page 99] for a planned contract using the mass-maintenance method (that is, the method you use when entering weight/analysis/event details for more than one LDC event with common data), complete the following steps:

1. Complete steps 1 to 5 as detailed in the documentation for creating an LDC object using the direct entry [page 100] method.

2. Select the LDC objects and choose 🖽 for *Event Details*. In the Additional Information screen area, enter an event date (if different from current date. The event date controls when the LDC event occurs). Choose 🖫.

3. Choose 🖽 for *Weights Details*. From the dropdown list, select the certificate category, unit of measure, gross weight, and any other data common for all selected LDC objects. Check the data, and choose 🖫.

4. Choose 🖽 for *Analysis Details*. From the dropdown list, select the certificate category, analysis type, dispute status, and any other data common for all selected LDC objects. Check the data, and choose 🖫.

5. To release the LDC object, click *Back*. The object status flag turns to green, with the status *03: Released.* Choose 🖫. The object is now released to the Orchestration Framework [page 108] for further processing.

8.1.1.1.2 Changing LDC Objects

Prerequisites

- You are logged on to the system in the Load Data Capture user role.
- One or more LDC objects have already been created.

Context

An existing LDC object [page 99] can only be changed (that is, modified or updated) or displayed in the following situations:

- The object status is *OF Execution Successful* or *OF Execution Failed*
  For objects with these statuses, you can enter new weight and grade information, and can change existing event details.
- The object status is *OF Determination Triggered* or *Draft*
  For objects with these statuses, you can change weight, analysis, and transportation information, and can make changes to certain event details.

Note that if the object status is *Obsolete*, you cannot make any changes to the LDC object in question.

Procedure

1. In the *SAP Easy Access* menu, choose ▌▶ *Agricultural Contract Management* 〉 *Load Data Capture* 〉 *Maintain LDC* ▐. Alternatively, you can enter transaction `/ACCGO/UIS_WC` to call the Load Data Capture Workcenter. Choose *Change LDC Object*.

2. Choose a method to edit the object, and enter any changes to the data as required. (For information about the methods available, see the documentation for Load Data Capture (LDC) Object [page 99].)

3. Once you have made your changes, release the LDC object. Click *Back*, and choose 💾 to save the object.

   The object status flag turns to green, with the status *03: Released*. Choose 💾. The object is now released to the Orchestration Framework [page 108] for further processing.

8.1.1.1.3   Making LDC Objects Obsolete

Prerequisites

You are logged on to the system in the Load Data Capture user role.

Context

You can make an LDC object obsolete at any time. However, if the status flag is red or chequered, you must ensure that the objects created during Orchestration Framework [page 108] (OF) processing are **manually** reversed and deleted in the reverse order they were created. In other words, you must manually reverse the last document created (check the OF log), and work back from there.

Procedure

1. In the *SAP Easy Access* menu, choose ▶ *Agricultural Contract Management* ❯ *Load Data Capture* ❯ *Maintain LDC* ❯. Alternatively, you can enter transaction `/ACCGO/UIS_WC` to call the Load Data Capture Workcenter.

2. Choose *Change LDC Object*. In the *Change LDC Object* screen, you can search by date for the object(s) you want to make obsolete in the *Quick Search* screen section. Alternatively, you can call up the object(s) in question by entering the LDC type or status in the *LDC General Information* screen section, or by entering the event details as relevant in the *LDC Event Information* screen section.

3. To make the object(s) in question obsolete, select the LDC object line item, and choose ✖.

8.1.1.1.4   Adding Tabs to LDC Screens

Prerequisites

To use the Add-On Tabs framework, users must first execute the BAdI *Process User-Defined Add-On Tabs for LDC Screens* to create the BAdI implementation for `/ACCGO/ADD_ON_TAB_UIS`. This is done in Customizing for SAP Agricultural Contract Management, under ▶ *Enhancements Using Business Add-Ins* ❯ *Load Data Capture* ❯. This multiple use BAdI allows users to add tabs to the *Create* and *Change* screens in the LDC Workcenter. It is called when the screen in question is being created, during processing and before output event. Implement the methods to enable the functions of the new screen.

Context

SAP Agricultural Contract Management provides an Add-on Tabs framework as part of Load Data Capture [page 97] (LDC), whereby users can add up custom tab pages to the LDC main screen at event level in the Load Data Capture Workcenter [page 98].

Customers can add up to two tabs, but if Brazilian localization is active in the system, only one extra tab will be available for adding, since the localization will be using the other tab. In order to use this framework, users must design their own screens and write the flow logic of these screens to update the appropriate structures and tables.

8.1.2 Load Data Capture: Vendor Split

Use

Vendor split allows you to split ownership from one vendor with 100% ownership to multiple vendors. You can perform vendor split for both commingled and purchase scenarios. You can perform a vendor split for an event in the Load Data Capture (LDC) Workcenter [page 98] maintaining the percentage of ownership for the original vendor, and then splitting this between multiple vendors. To do this, you must first set up the vendor split rule in the Business Rules Framework plus (BRFplus) Workbench. You can also define which vendor to process in the purchase order created after the LDC is released. (The default purchase order vendor is calculated using the LDC header vendor and application instruction.)

The following types of vendor split are available:

- Ad-hoc split: This split is defined during load data capture. You manually define which vendors are included in the split, and the quantities (or percentage) of the split. The ad-hoc split allows you to create and delete vendor lines as needed.
- Split profile: This split is defined using a new business rule. The business rule defines what splits are usual for a given vendor. If the combination of material, vendor, and event location is configured in the business rule, these splits are automatically retrieved and shown during load data capture. You can then perform a split profile in the LDC workcenter.
- Split at application: This split is defined at application. You can add comments to the LDC outlining the vendors, percentages, and quantities, as well as the reasons why the split is delayed. These comments are visible in the MAW.

> **i Note**
>
> When creating an LDC, if you do not want to perform a split, you can select the *Block Split* check box. This hides all vendor split information from the LDC.

To perform a vendor split, the LDC must have one of the following application instructions:

- 03: *Existing Contract*
- 05: *Regular Spot*
- 06: *Accumulate to Own*
- 07: *Accumulate to Store*
- 10: *Unassigned*

Before you create an event to split amongst vendors, you must first set up the rule for the vendor split functionality. Then, when you create the event, you can select the appropriate split type for the unload event in the LDC workcenter. The Orchestration Framework [page 108] creates a commingled or purchasing posting and application document with one or more line item per vendor, depending on the split rule. For vendor splits, depending on the application instruction you select, the result is always a commingled application document or a purchasing application document.

Activities

1. Set up the vendor split rule in the Business Rules Framework plus (BRFplus) Workbench (transaction `/nBRF+`) To do this, add the catalog `/ACCGO/RULES_CATALOG` (*Maintain rule data*) to your user, and set up the vendor split rule (*Vendor Split UI01*).

> **i Note**
>
> You only perform this activity if you want to perform a split profile.

8.1.3 Load Data Capture: Integration with Nomination and TSW

Use

During Load Data Capture [page 97], certain attributes of a purchased load are captured, in order to determine whether a load conforms to contract requirements (or to generate a spot contract in an unplanned business scenario). A load can be captured against different reference documents, including the nomination [page 115]. The nomination is a scheduling and communication document used in the Trader's and Scheduler's Workbench (TSW). The TSW oversees stock projection and the planning and scheduling of bulk shipments through the use of nominations, allowing users of SAP Agricultural Contract Management to schedule bulk shipments of commodity products while taking into account supply, demand, and available transportation. A TSW location is a node point on the transport system and is used as an organizational entity for which certain information can be defined and later defaulted by the system in subsequent TSW processes. You define LDC-relevant TSW locations when setting up the master data for Load Data Capture.

Activities

- In the SAP Easy Access screen, maintain the TSW locations under ▐▶ *SAP Agricultural Contract Management* ❯ *Load Data Capture* ❯ *Maintain TSW Locations* ❯
- In the SAP Easy Access screen, maintain the LDC-relevant TSW locations under ▐▶ *SAP Agricultural Contract Management* ❯ *Load Data Capture* ❯ *Set Up Master Data for LDC* ❯

- In Customizing for Load Data Capture, define the ticket type to be used for TSW ticket creation by different calling applications, including LDC (*SAP Agricultural Contract Management* > *Load Data Capture* > *Define TSW Ticket Types for OF Events)*)

- In Customizing for Logistics Execution, assign functions to groups under *Logistics Execution* > *TSW* > *General Settings* > *Junction Functions* > *Define Junctions* .

- In Customizing for Nomination, configure your settings as necessary under *Logistics Execution* > *TSW* > *General Settings* > *Nomination* .

8.1.4 Load Data Capture: Integration with Application Document

Use

The application document is an intermediate SAP document that is created after receipt or post goods issue. It facilitates contract application and settlement to allow the application of, for example, discount premium quality schedules [page 22] (DPQS), the evaluation of tolerances, and the evaluation of optionalities.

The application document contains vendor and customer, material, quantity, and quality details, as well as other application details such as quantity adjustments. Once an event release has been triggered, the application document is created through the Orchestration Framework [page 108] and is used to link a load quantity to a pricing contract during the application process. It can later be updated with Load Data Capture [page 97] (LDC) and nomination information, where available. During load and unload events, the application document number is used to evaluate final application.

More Information

Application Document [page 120]

8.1.5 Adding Tabs to LDC Screens

Prerequisites

To use the Add-On Tabs framework, users must first execute the BAdI *Process User-Defined Add-On Tabs for LDC Screens* to create the BAdI implementation for `/ACCGO/ADD_ON_TAB_UIS`. This is done in Customizing for SAP Agricultural Contract Management, under *Enhancements Using Business Add-Ins* > *Load Data Capture* . This multiple use BAdI allows users to add tabs to the *Create* and *Change* screens in the LDC

Workcenter. It is called when the screen in question is being created, during processing and before output event. Implement the methods to enable the functions of the new screen.

Context

SAP Agricultural Contract Management provides an Add-on Tabs framework as part of Load Data Capture [page 97] (LDC), whereby users can add up custom tab pages to the LDC main screen at event level in the Load Data Capture Workcenter [page 98].

Customers can add up to two tabs, but if Brazilian localization is active in the system, only one extra tab will be available for adding, since the localization will be using the other tab. In order to use this framework, users must design their own screens and write the flow logic of these screens to update the appropriate structures and tables.

8.2   Orchestration Framework

Use

In certain scenarios, deliveries or goods movements occur prior to an order having been generated (unplanned scenarios), or require mirroring of existing documents (intercompany scenarios). In these cases, many documents may need to be created to ensure that a full document trail exists for the quantity moved. These documents may be generated manually, but a level of automatic generation is required to support timeliness and to reduce manual intervention.

The Orchestration Framework (OF) is a tool that automates the logistics process. A configurable framework governed by business rules, the Orchestration Framework is used to determine the business scenarios in question. On event completion, the OF is called. Using information derived from the Load Data Capture [page 97] (LDC) screen, the nomination [page 115] screen, or the Manual Application Workcenter screen, the OF validates the quantities involved and determines the applicable scenario. It then calls the stack of services configured for that scenario to create logistical documents, as well as the application document that is used for settling payment with the vendor or customer. If the document postings fail, the Recovery Report retriggers the process. Note that the OF is run as a background processing engine. There is no user interface.

Integration

- Load Data Capture is the front-end to the OF. The OF determines logistical documents for each application instructions defined during LDC. On event release, the OF reads the application instruction defined for an LDC and determines various possible scenarios.
- The OF supports *3rd Party Purchase*, *3rd Party Sales*, *Back-to-Back*, *Inter/Intra Company Sales*, and *Returns* scenarios.

- The OF uses standard TSW ticketing functionality to create downstream documents. The TSW ticket type identifies from which application or source (LDC, nomination, or application document) a ticket originates or is created.

Features

- **Orchestration Execution**
  Based on the data in the LDC screen, the OF determines the business scenario type, transaction type, title transfer, and whether a new vendor is required.

- **Orchestration Determination**
  During execution, the OF oversees the creation of follow-on documents, determines the material, and updates the LDC status.

- **Orchestration Framework Automation**
  This helps you to automatically cancel documents generated during OF process. This automation considerably reduces the need for manual intervention in reversing the application document, thereby reducing the possibility of errors and increasing the Load Data Capture process agility.

- **Recovery Report**
  If a service stack fails at any point, the recovery report reprocesses the follow-on stack and completes the document postings.

8.2.1 Document Generation

Use

In certain scenarios, logistical documents need to be created to ensure that a full document trail exists for quantities moved or changed. While these documents can be generated manually, the automatic document generation provided by SAP Agricultural Contract Management (with the integration of the Trader's and Scheduler's Workbench [TSW]) supports timeliness and reduces manual intervention. The Orchestration Framework [page 108] (OF) reads the data captured during Load Data Capture [page 97] (LDC) to determine the business scenario in question. It then calls the stack of services configured for that scenario in order to generate follow-on documents. The stack and sequence of these functions can vary: a wide range of scenarios are supported, depending on user configuration, and different documents are required for different scenarios.

The application instruction defines the way in which a load is recorded during LDC. In the table below, the possible LDC application instructions are listed, along with their corresponding mandatory documents.

Application Instruction	Required Documents
Existing Contract	The application document is applied to an existing contract (using application rules)
Open Contract	The application document is applied to an existing sales order or purchase order (using application rules).

Application Instruction	Required Documents
Inter/Intracompany	Stock transport order (STO) for load
	STO for unload
Unassigned	None: The load is processed as commingled stock.
Accumulate to Store	None: The load is processed as commingled stock
Regular Spot	An automatic (spot) contract for an unplanned scenario is created. In this case, the application documents are marked 'Awaiting Spot' in the background, until further processing is performed in the Manual Application Workcenter to generate the spot contract.
Accumulate to Own	An accumulate to own contract is generated upon receiving the first load from a vendor, after which the quantities from future loads will be accumulated or updated to that contract.
Return	Order/delivery return document for a purchase return or sales return
In Store Sales	Combines the steps to create LDC for a Sales scenario followed by Spot Purchase and Accumulate to Own scenario
In Store Purchase	Generates the Accrual Application Document along with Purchase Application Document

Prerequisites

- In Customizing for Load Data Capture, you have defined the application instructions as required under
  ▶ *SAP Agricultural Contract Management* ❯ *Load Data Capture* ❯ *Define Application Instructions* ❯.
- In the Business Rules Framework plus (BRFplus) Workbench (transaction `/nBRF+`), you added the catalog `/ACCGO/RULES_CATALOG` (*Maintain rule data*) to your user, and have set up the rules for OF determination and execution.

Process

Orchestration determination

The Orchestration Framework is instructed by the data captured by the LDC screen (namely, the event ID, the application instruction, the event type, and the status of the event, amongst others) to determine the scenario in question. Once the scenario has been established, the OF calls the stack of services configured for that scenario in order to carry out further processing.

Orchestration execution

The OF uses an interface (`/ACCGO/EXECUTE_OF`) common to the entire API. This ensures flexibility in function module (FM) creation and allows customers to create as many FMs as needed with the service stack (junction function). BRF+ rules are used to configure the specific movement scenario for OF execution. All standard logistic documents can be automatically created through the FM stack. Customers can use the sample FMs delivered by SAP Agricultural Contract Management as a basis for developing their own FMs. These sample FMs generate goods movements and create the application document, which contains the LDC ID. Customers can develop all other logistical documents using their own specific FMs which mirror the sample FMs for import and export fields. Existing logistical documents can be updated within the service stack, using custom RICEFW development.

> **i Note**
>
> The function modules for OF execution begin with the namespace `/ACCGO/OEP*`.

More Information

- Orchestration Framework [page 108]

8.2.2 Orchestration Framework Automation

Use

In certain scenarios, you may want to cancel the documents automatically generated by OF during Load Data Capture process. Orchestration Framework Automation helps you to automatically cancel such documents.

This automation considerably reduces the need for manual intervention in reversing the application document, thereby reducing the possibility of errors and increasing the Load Data Capture process agility.

Orchestration Framework Automation offers three operations:

- Document Correction
- Document Reversal
- Stock in Transit

Prerequisites

- The Orchestration determination and execution processes have been executed and an OF ticket has been generated successfully.
- For Stock in Transit, you have maintained the movement types in Customizing for ▷ *Logistics - General* ❯ *Global Trade Management* ❯ *Agricultural Contract Management* ❯ *Contract Application* ❯ *Commingled Stock* ❯ *Maintain Movement Types* ❯ .

Process

Document Reversal

1. You select the required LDC Object.
2. The system validates the following parameters and Reversal is not allowed:
   1. If no LDC ticket exists
   2. If the LDC is already with status *OF Reversal Successful* or *OF Reversal Failed*
   3. System checks if application document can be canceled with the following conditions and Reversal is not allowed:
      - If the application document is a Return Application Document (RPD or RSD)
        - If the application document type is different from AAD and CAD and if the transition of status to *cancelled* is not allowed.
        - If application document type is a MAD and if settlement has the status *Fully Storage Settled*.
      - If the application document type is CAD or AAD, Reversal is not allowed:
        - If there is any ticket with an error state for that application document.
        - If the application document status is different from *Settlement not relevant* and *Ready for Settlement*.
        - If a settlement with status *Intermidiate Storage Settled* or *Fully Storage Settled* already exists.
        - If all the application document quantity is not in *Unassigned* or *Storage* state.
3. After the validation checks, the OF automation process reverses the document to its previous version.
4. The system creates a new OF ticket and you can view multiple tickets in the *Recovery Report*. One ticket shows the OF forward process and the second ticket shows the *Reversal* process. The new ticket also shows the purpose of the change in the ticket as **5** which stands for *Reversal*.

Document Correction

1. You select the required LDC Object.
2. The system validates the following parameters and Correction is not allowed:
   1. If there is no OF ticket
   2. If the correction ticket is in an error state.
   3. If the application document instructions is *31 - Sale out*
   4. System checks if application document can be cancelled, and Correction is not allowed:
      1. If application document is a return application document (RPD or RSD)
         - If application document type is different from AAD and CAD and if transition of status is to *cancelled* is not allowed.
         - If application document type is a MAD and if settlement has the status *Fully Storage Settled*.
         - If application document type is CAD or AAD and if there is a ticket with an error state for that application document.
         - If the application document status is different from *Settlement not relevant* and *Ready for Settlement*.
         - If a settlement with status *Intermidiate Storage Settled* or *Fully Storage Settled* already exists.
         - If all the application document quantity is not in *Unassigned* or *Storage* state.
3. Use the OF process to unlock the documents for corrections.

> **i Note**
>
> In some scenarios like the 3rd Party Purchase, you need to first reverse the Application Document and then trigger *Correction*. This step is required only if the document has been applied and not otherwise.

4. Once the required values are modified and the object is released, the OF Automation process reverses the document and creates a new set of documents.
5. The process also creates a new OF ticket and you can view multiple tickets in the *Recovery Report*. The new ticket shows the purpose of the change in the ticket as **2** which stands for *Correction*.

Stock in Transit

Stock in Transit (SIT) allows the system to adjust by adding or removing quantities from Stock In Transit when the Load and Unload quantities mismatch.

> **⁂ Example**
>
> For example, in a 3rd Party Purchase with Title Transfer Origin (TTO) contract, you create a Load Data Capture with 25 tonnes in a Load event and release the event. The Orchestration Framework creates a 107+ movement in SIT with 25 tonnes. You then proceed to create the *Unload* event with 27 tonnes. The Orchestration Framework again tries to create a 109 movement, by moving 27 tonnes from SIT to unrestricted stock. However, this movement fails because the SIT lacks 2 tonnes which are not in transit. Typically, you are expected to manually add the 2 tonnes to the SIT and re-execute OF to execute it successfully. But with SIT, this process is automated thereby reducing the need for manual intervention.

SIT adjustments are applicable for the following scenarios:

* 3rd party purchase TTO
* Intercompany (TTD / TTO)
* Intracompany (TTD / TTO)

Activities

1. In the *SAP Easy Access* menu, choose ▶ *Agricultural Contract Management* ❯ *Load Data Capture* ❯ *Maintain LDC* ❯. Alternatively, you can enter transaction `/ACCGO/LDC_WC` to call the Load Data Capture Workcenter. Choose *Change LDC Object*.
2. Search for the LDC Object you want to reverse and choose 🕓.
3. In the next screen select the required LDC, select *Reverse* to reverse the changes or *Correction* to reverse the changes and create a new set of OF documents.

8.2.3 Recovery Report

Use

Once the Orchestration Framework [page 108] has validated the information captured during Load Data Capture, it determines the applicable scenario and calls the stack of services configured for that scenario to create logistical documents, as well as the application document that is used for settling payment with the vendor or customer. If the document postings fail, the Recovery Report retriggers the process. You can call the Recovery Report from the LDC [page 98]screen by choosing the *Recovery Report* icon provided at event item header level.

Activities

In the SAP Easy Access menu, choose ▌▶ *SAP Agricultural Contract Management* ❯ *Load Data Capture* ❯ *Orchestration Framework* ❯ *Recovery Report* ❭, and enter search ticket details as required.

8.3 Back-to-Back

Use

Back-to-Back is a trading scenario where a company sells a quantity of a commodity that it does not yet own or hold in inventory. This quantity may be at a vendor's site or may already be in transit to the company. To manage the movement and document chain when a quantity is sold to a counterparty without physically being received by the company, data must be captured about the delivered quantity, at its destination as well as potentially at its source. In addition, documents that record the flow of goods and support the financial settlement must be generated.

Back-to-Back links the purchase and sales documents (the contract or order) through the standard SAP transaction Nomination [page 115] (O4NM) It allows users to do the following:

- Track inventory that is in transit for the Back-to-Back scenario in question
- Link the sales and purchase processes in one transaction
- Plan shipments according to the required customer and vendor terms
- Explore different optionalities for purchase and sale contracts
- Defer revenue recognition of a sale until the cost for the related purchase is recognized
- Relate the weights, grades, and characteristics for a Back-to-Back quantity to all elements of the purchase and sale process
- Mirror logistic documents from one organizational entity to another, depending on the scenario in question
- Reverse documents relevant to Back-to-Back (up to a certain point)
- Manage inventory based on the differences in contract terms for governing weights and governing quality (DPQS [page 22]) throughout the life cycle of the Back-to-Back process

More Information

- Load Data Capture: Integration with Nomination and TSW [page 106]
- Nomination Maintenance [page 115]
- Peforming Pegging [page 116]
- Contract Optionalities [page 48]

8.3.1 Nomination Maintenance

Use

A nomination is a scheduling document that is used to schedule bulk shipments of agricultural commodity products. It provides detailed shipment information and serves as a communication link between the carrier, customer, and all other parties that are connected in a transport. Each nomination has one or more line items per material. You create a nomination by calling the nomination maintenance transaction, O4NM. In the maintenance screen, you create a nomination by using any of the following combinations of criteria:

- Two trading contracts (either a sales, purchase, or inter/intracompany contract)
- Two orders (either a sales, purchase, or stock transport order [STO])
- A purchase contract and an STO
- A sales contract and an STO
- An inter/intracompany contract and a purchase order, sales order, or STO

The nomination cross-references the information in the criteria combinations above and contains references to contract optionalities such as load location, discharge location, payment terms, mode of transport, load rate, and discharge rate. You can define or change optionalities at the nomination level. Once you have confirmed a nomination, you refer the nomination in question for further document postings in the Load Data Capture [page 98] (LDC) screen.

Integration

- If a nomination is relevant for Back-to-Back [page 114], you can indicate this in the nomination screen by selecting the *Back-to-Back* pegging type.
- In certain scenarios, load data is captured using the nomination as a reference document.

Prerequisites

In Customizing, you have configured your settings under ▶ *Logistics Execution* ▶ *TSW* ▶ *General Settings* ▶ *Nomination* ▶.

Activities

You can carry out the following maintenance tasks for the nomination in transaction O4NM:

- Create a nomination
- Confirm a nomination
- Display or change a nomination
- Cancel a nomination

More Information

-
-
-

8.3.1.1   Performing Pegging

Context

Pegging is used to plan and schedule bulk shipments based on supply and demand information. The term 'pegging' refers to the matching of demand items to supply for the purpose of scheduling of bulk shipments, such as marine voyages or pipeline batches. You plan and schedule bulk shipments, by assigning the pegged items to the distribution schedule. During pegging, the system uses the supply and demand items that are created to change or create quantities. Pegging is performed from the nomination item list, using a unique pegging type which binds the selected line items together with a unique, system-generated pegging ID. Different pegging types and IDs can be generated in a single nomination.

Procedure

1. In the nomination maintenance [page 115] screen, select the nomination line item.
2. Click the *Pegging* icon that is provided at the header level. A drop-down list of pegging types appears. Select the appropriate pegging type. This activates the creation of deliveries from confirmation of the nomination.
3. If the pegging is successful, a success message appears. To confirm this, you can select the *Show Pegged Items* icon at header level. This displays a new view with the pegged items.

Next Steps

8.4 SIT Cockpit

Use

The SIT (Stock in Transit) Cockpit lets you view details of all the stock which is in transit or due for delivery. You can use this function for a third party scenario, and also for an intercompany and intracompany scenario.

Features

The SIT Cockpit provides detailed information about the transit stock in the following views:

- Inbound View
  This view provides details of the stock that is on the way to the incoming plant. The ownership of this stock is with you, the receiving plant.
- Outbound View
  This view provides details of the stock for which the outbound delivery has been made and is on the way to the target plant. The ownership of this stock is with you, the supplying plant.
- Anticipated View
  This view provides details of the stock that the incoming plant is expecting, which is an incoming stock. The ownership of this stock is not with you, the receiving plant.

Activities

1. On the *SAP Easy Access* screen, choose ▶ *Agricultural Contract Management* ❯ *Load Data Capture* ❯ *SIT Cockpit* ❯.
2. Choose *SIT Cockpit*.
3. Enter the required details to view the document.
   The SIT cockpit screen appears.

   > **i Note**
   >
   > If you want to view an intercompany or intracompany document, select the *Inter/Intracompany* checkbox.

4. In the *Inbound View* tab page, you can view all purchase related documents and their relevant document flow.
5. In the *Outbound View tab page*, choose the application document.
6. Choose *Proof Of Delivery* pushbutton for an intercompany or intracompany scenario to transfer stock.
7. In the *Anticipated View* tab page, you can view all the documents for which delivery is anticipated.

> **i Note**
>
> - For an intercompany or intracompany TTI (Title Transfer In Transit) sales scenario, the stock is transferred from the outbound SIT of the seller to the inbound SIT of the receiver.

- You can filter the data in the views based on a number of combinations or selection parameters.

9   Contract Application

Use

Contract application is the process of linking an application document line item to a pricing trading contract (TC). The system creates an application document after the generation of a goods receipt or goods issue (GR/GI) document.

The contract application process links the application document to the pricing TC. The linking occurs technically through the logistical TC, which is created upon the save of the purchase order (PO) or sales order (SO).
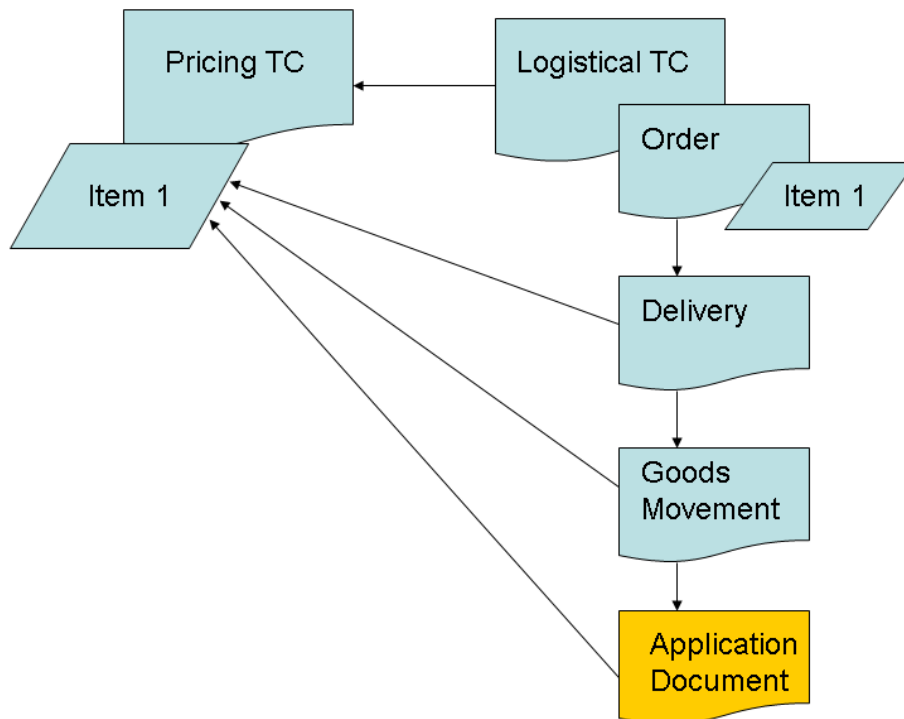
Relationship Between the Pricing TC and an Application Document

In a planned purchase scenario, the PO is called-off against a pricing TC. At this point, a link is established between the logistical TC item and the pricing TC commodity item. The system creates an application document and establishes a link between that application document and the pricing TC commodity item.

In both planned and unplanned scenarios, the system validates a load against contract terms. In an unplanned scenario, you can choose between the following options:

- Check if you can apply it to existing contracts, if any, and determine whether the load is to be applied automatically or manually in the manual application workcenter
- Create a spot contract for the load
- Place the load in storage and purchase it at a later time

Features

Contract application occurs automatically in the system, however, the contract application component contains a manual application workcenter, which enables you to do the following tasks:

- Display an application document (including application documents for a commingled load)
- Set a price for a spot contract
- Set a final delivery indicator for a load
- View application returns
- Maintain pricing aspects
- Assign a warehouse receipt

You can also use the manual application workcenter to create, display, and maintain an application group. By grouping application documents together in application groups, you can facilitate manual applications.

Check the approval status of the Trading Contract as only an approved contract can be used during the Contract application process. If you apply a non-approved contract in the application workcenter manually, then an error message is displayed. For more information on Contract Approval, refer to Approving a Commodity Contract [page 54].

9.1 Application Document

Definition

An application document is an intermediate SAP document that is delivered with SAP Agricultural Contract Management and used to facilitate contract application and settlement. The application document has a one-to-one relationship with a goods receipt (GR) document or goods issue (GI) document and is created at the time of posting.

Use

The primary use of the application document is to enable processes such as the application of discount premium quality schedules, evaluation of tolerances, evaluation of optionalities, and so on.

The application document displays the vendor or customer, the material, in addition to the quantity and quality details. Other application details (such as quantity adjustments) are also displayed.

The system creates an application document when you release a Load Data Capture (LDC) event. The creation of the goods movement document can be automated through the Orchestration Framework (OF) or can be performed manually.

Structure

The application document user interface (UI) is composed of three screen areas titled *Header*, *Item Overview*, and *Item Details*.

The *Header* screen area contains the application document number and type.

The *Item Overview* screen area contains the following tab pages:

- *Header* - details on the associated logistical documents for the application document
- *Items* - the master items and subitems that correspond to each GR/GI item
- *Admin Data* - details on the document's creation and subsequent changes

The *Item Details* screen area contains the following tab pages that provide further information for each item on the application document:

- Analysis/Weights - these tab pages display the analysis and weights from the repository.
- LDC - displays Load Data Capture information
- Optionalities - displays details on any optionalities contained in the corresponding contract
- Quantities/Quantity history - these tab pages detail how much was delivered, applied, adjusted and the original item quantity for a specific item, along with storage program details where relevant.
- Nomination - information on nomination in the case of a back-to-back scenario
- Inventory Balance Posting - displays all the goods movement messages sent from this system
- Warehousing - displays details relating to warehousing of the goods, including the receipt number

The following are the Application Document Types:

Application Document Type	Description
Commingled Application Document (CAD)	Represents 3rd party goods stored at the Company facility
Load Out Application Document (LAD)	Created when a company loads out 3rd Party owned goods out of a Company owned facility
Accrual Application Document (AAD)	Represents a Company owned goods stored at a 3rd Party Facility
Manual Application Document (MAD)	Represents a Company owned goods sold from a 3rd Party Plant
Purchase Application Document (PAD)	Represents a company purchased goods linked to a purchasing contract

Application Document Type	Description
Sales Application Document (SAD)	Represents a company sales goods linked to a sales contract

For more information about working with these application documents, refer to topics Load Out Match [page 158] and Spot Contracts [page 131].

9.1.1 Displaying Application Documents

1. On the SAP Easy Access screen, choose ▌▶ *Agricultural Contract Management* ❯ *Contract Application* ❯ *Maintain Application Document* ❯ .
2. Click the *Display* node.
3. Enter an application document number or search for an application document number. You can search based on a purchase document, sales document, or delivery number, and so on.
4. Choose ⊕ .
5. In the *Item Overview* screen area, choose the *Items* tab page. You can view the flow of documents that lead to this application document by choosing *Docflow*.
6. Select the relevant item.
7. In the *Item Details* screen area, you can view further details on the following tab pages:

Tab Page(s)	Details Displayed
Analysis/Weights	Analysis and weights from repository
LDC	Load Data Capture information
Optionalities	Details on any optionalities contained in the corresponding contract
Quantities/Quantity history	How much was delivered, applied, adjusted, and the original item quantity for a specific item, along with storage program details where relevant
Nomination	Information on nomination in the case of a back-to-back scenario
Inventory Balance Posting	All the goods movement messages sent from this system
Warehousing	Details relating to warehousing of the goods, including the receipt number

9.1.2 Alternative Application Processing Option

Use

The alternative application processing option (AAPO) is the feature which allows the specification of application instructions to be applied when there is extra quantity in the Load Data Capture (LDC).

The AAPO takes place when a larger quantity than the one defined in the trading contract (TC) is specified in an LDC generation. In such a case, a partial application takes place during the contract application and the load will be split into two application document items, one with the quantity defined in the TC and the other one with the extra quantity which will have the application instruction defined in the AAPO rule

The AAPO feature supports the partial application of a purchase application document (PAD) and a commingled application document (CAD). However, there are certain Customizing dependencies as well as restrictions apply.

Prerequisites

The following business rules have been configured with relevant application instructions for AAPO in BRFplus:

- AP09 (Fill and Roll)
- AP10 (Partial Application Rule)
- AP18 (AAPO)
- AP14 (Default Storage Settlement)
  Note that this rule is only relevant for commingled scenarios.

> ⚠ Caution
>
> - To enable the AAPO feature for CAD scenario, the CAD Route switch must be activated in Customizing for *Logistics - General* under ▷ *Global Trade Management* ❯ *Agricultural Contract Management* ❯ *Basic Settings* ❯ *Activate Feature Switches* ▷.
> - The title transfer at origin (TTO) and nominations scenarios are not supported by the AAPO feature.
> - It is not possible to use the application instruction 07 (Accumulate to Own) for PAD. If the configuration is done in such a way in BRFplus, the system will automatically apply the application instruction 10 (Unassigned).

Process

1. A commodity is received with a TC. This is an ordinary SAD scenario.
2. During the LDC generation, it is found that the actual quantity is larger than the one defined in the TC.
3. During the contract application, the system triggers the AAPO feature.
4. Depending on the application instruction configured in BRFplus, the partial application takes place by creating a new application document item.

The following table summarizes the similarities and differences between the CAD and PAD scenarios:

	CAD	PAD
CAD-Route Switch in Customizing	Activated	Deactivated

	CAD	PAD
Status of 1st Line Item after Contract Application	Finally Applied	Finally Applied
Status of 2nd Line Item after Contract Application	Storage Unassigned	Awaiting Spot/AO Ready to Apply
Storage Relevancy of Commodity in Material Master Data	Relevant The system will find a valid storage agreement based on the configuration in BRFplus.	Not Relevant

More Information

9.2 Application Rules

Use

You can create the business rules by which the system executes contract application in any given instance using the Business Rules Framework Plus (BRFplus) Workbench.

Features

The business rules relevant to the contract application component are detailed in the following table:

Rule	Description

Application Mode	You use this rule to determine whether application is to be automatic or manual. If you set the application mode as manual for a particular plant and commodity then all the application documents created in that particular plant for that commodity will be always sent to the manual application workcenter for manual application. This rule is only applicable in an unplanned scenario.
Auto-Application Type	In this business rule, you can determine for a given material and plant combination which automatic application type the system employs - whether the application document is applied to an existing contract (using application rules), a spot contract, an accumulate to own contract, put in storage, or left unapplied.
Application Rules/Call-Off Sequencing	You can maintain application rules at plant level to select contracts and sort them. You can base the sorting of the selected contracts on the following criteria: • Pricing type of the contract - no price, no futures, fully priced, and so on. • Price status • Creation date (oldest to newest) • Delivery period selection (oldest open to the newest open - including future given tolerance) • Settlement status, for example, with advance or pre-payment
Preliminary Overfill Tolerance	Using this rule, you can set a preliminary overfill tolerance that works in conjunction with the contract overfill tolerance (an additional percentage). You can set the provisional application to proceed with a warning, without a warning, or to stop with an error message based on the values you maintain in the rule. For example, if the open quantity is 100 MT, the contract tolerance is 10%, and the preliminary overfill tolerance business rule range is 5% to 15%, then the following results: • A provisional weight of up to 115 will allow contract application to proceed without a warning message. • A provisional weight from 116 through to 125 will allow application to the contract to proceed with a warning message.

Preliminary Underfill Tolerance	You use this rule to issue a warning or error message during evaluation of the underfill tolerance maintained in the contracts. You can set the preliminary underfill tolerance to a percentage figure that operates in conjunction with the contract underfill tolerance. Furthermore, you can use the rule to determine whether the system issues a warning or error message should the quantity fall into the underfill tolerance range maintained in the business rule. For example, if the open quantity is 100 MT, the contract underfill tolerance is 10%, and the preliminary underfill tolerance business rule is 5 %, then the following results: - A provisional or final weight from 85 to 89 will allow application with a warning message. - A provisional or final weight from 90 to 99 will allow application to the contract with an information message.
Early Delivery Tolerance	You maintain this rule at the plant/commodity level to relax the delivery period restriction. You must use the number of days that you maintain in the rule in conjunction with the delivery period maintained for the commodity item in the contract (delivery to date minus the number of days). For example, if 7 days is maintained, and the delivery start date in the contract for the commodity item is 2010-12-01, then a load arriving in the last 7 days of November also can be applied.
Late Delivery Tolerance	You maintain this rule at a plant/commodity level to relax the delivery period restriction. The number of days you maintain in the rule has to be used in conjunction with the delivery period maintained for the commodity item in the contract (delivery to date plus the number of days). For example, if you set the rule to 7 days, and the delivery end date for the commodity item in the contract is 2010-10-31, then a load arriving in the first 7 days of November also can be applied.
Call-Off Mode	This rule determines the call-off mode - automatic, proposed, or manual.
Firming	This is a selection rule (between firmed and unfirmed) that determines the firming of a call-off.
Call-Off Tolerance	This rule is a yes or no decision rule. It determines whether tolerance maintained in the contract is considered during call-off process.
Call-Off Preliminary Over-Apply Tolerance	The rule is analogous to the preliminary overfill tolerance rule, in which you maintain percentage values, but this rule comes into effect during the call-off process.

Automatic Fill and Roll	This business rule comes into effect during the application process to determine firstly whether a fill and roll to the next contract should occur or not, and secondly whether a fill and roll to another commodity item within the same contract should occur or not. .
Automatic Approval and Transfer to FI (Settlement)	This is a yes or no decision rule that determines automatic approval and transfer to FI during the settlement process.

9.3 Manual Application Workcenter

Use

The manual application workcenter is a central cockpit for all functionality relating to the application of loads to contracts.

Features

You can use the manual application workcenter to perform the following tasks:

- Display [page 122] the contract application details
- Set the ready to price indicator [page 137] for accumulate to own contracts
- Manually assign pricing lots [page 71]
- View return application documents
- Set a final delivery indicator [page 127]
- Maintain and display [page 130] application groups
- Split [page 153] vendor ownership
- Collate [page 128] the vendor split

9.3.1 Setting Final Delivery Indicator

Context

You select the final delivery indicator to signify that no more new application documents can be applied against that particular trading contract (TC) commodity item.

You can set the final delivery indicator during the creation of application document, however you can only trigger an underfill by setting the final delivery indicator for the item in the manual application workcenter.

The system sends an underfill message to a third-party system depending on tolerance settings.

Procedure

1. On the SAP Easy Access screen, choose ▌▶ *Agricultural Contract Management* > *Contract Application* > *Manual Application Workcenter* ❯ .
2. Click the *Maintain Final Delivery Flag* node.
3. Enter the relevant contract details and choose ⊕ .
4. Select the relevant item and choose *Set Final Delivery Indicator*.

9.3.2 Collating Vendor Split

Context

You can reverse vendor splits created in the UIS or MWC and collate split lines back to their original state.

You can select an application item that was split (by either vendor or contract) and collate all split items of the same parent item back into a new application item. The new application item will have the same properties as the parent item before the split.

To collate vendor splits in the Manual Application Workcenter, all items must have the following statuses:

- Purchase Application Documents
  - Ready to apply
  - Reversed
  - No call-off exists
- Commingled Application Documents
  - Unassigned
  - Storage
  - Reversed with zero quantity
  - Awaiting spot assignment with zero quantity

Procedure

1. On the *SAP Easy Access* screen, choose ▌▶ *Agricultural Contract Management* > *Contract Application* > *Manual Application Workcenter* ❯

The *Manual Application Workcenter* screen is displayed.

2. In the dialog structure, choose ▌▶ *Application Workcenter* ❯ *Contract Application* ❯

   The *Contract Application* screen appears.

3. Search for the document you want to collate by specifying the *Application Document* number and choose
   ⏱.

4. Select the parent item of an application with split items and choose ⤮.

5. The *Confirmation* dialog box is displayed asking if you want to collate the selected item and it's sub items. Choose *Yes*.

   A new item with the total quantity of the collated items is created.

9.4   Application Group

Definition

An application group is a cluster of application document line items that are grouped by plant, material, or counterparty. You can create application groups for reporting purposes or for the joint processing of multiple application document line items.

Use

You create application groups in the manual application workcenter by searching for and selecting the relevant application documents. Additionally, you can use the manual application workcenter to display and maintain application groups.

It is possible to calculate a weighted average for the quality factors of each application document item in the application group. You can manage this calculation through a Business Add-In (BAdI).

Summarizing and averaging of application document values can be:

- Automatically triggered during the creation of an application group
- Automatically triggered during maintenance of the application group (when adding or deleting application documents)

Structure

Each application group has a unique number, a description, and application group type.

An application group can have the following processing statuses:

- Unapplied

- Errors
- Provisionally Applied
- Finally Applied
- Re-evaluation Needed
- Reversed

9.4.1 Creating Application Group

Procedure

1. On the SAP Easy Access screen, choose ▶ *Agricultural Contract Management* 〉 *Contract Application* 〉 *Manual Application Workcenter* 〉.
2. Click the *Application Group* node.
3. Click the *Create Application Group* node.
4. Enter an application document number or search for an application document number. You can search based on a purchase document, sales document, or delivery number, and so on.
5. Choose ⊕.
6. Enter the application document numbers, specifying the range from which the application documents are to be selected and grouped, then choose ⊕.
7. Select the line items from the contract application documents and choose ▦.
8. Select an application group type and enter a description for the group.
9. Choose ✔.

9.4.2 Displaying and Maintaining Application Groups

Context

You can display an existing application group and maintain it by changing its description and adding or deleting application document line items in the manual application workcenter.

Procedure

1. On the SAP Easy Access screen, choose ▶ *Agricultural Contract Management* ❯ *Contract Application* ❯ *Manual Application Workcenter* ❯ .

2. Click the *Application Group* node.

3. Click the *Maintain/Display* node.

4. To display an application group, enter the number of the application group and choose 🕑 .

5. To add more application documents to the group, select the application group and choose 🔧 .

6. To delete application documents from the group, select the application group and choose 🔧 .

7. To change the description of the application group, select the application group and choose ✏️ .

8. Enter a new description for the application group and choose ✔️ .

9.5   Spot Contracts

Use

You use this function to process unscheduled purchase of commodities from vendors.

There are two types of contract involved:

- Spot contract
  A spot contract can be used when a commodity has a potential for multiple deliveries in one day.
- Accumulate to Own (AO) contract
  An AO contract is a type of spot contract. Unlike a spot contract, however, an accumulation occurs over a period of time before sending to pricing by setting the *Ready to Price* indicator.

> **i Note**
>
> A spot contract is created after the execution of Spot Monitor.
>
> An AO contract is created after receiving the first load from a vendor and the execution of Spot Monitor. Then the quantities from further loads are accumulated or updated to the created contract during further execution of Spot Monitor.

You can also use this function to generate Spot Contracts for the Purchase Application Documents (PAD) and Commingled Application Documents (CAD) based on the factor of storage relevance.

If an LDC material is storage relevant, then you use a CAD spot contract. If not, then you use a PAD spot contract. To set an item as storage relevant, you can use the standard transaction MM02 or navigate from the SAP Menu to *Logistics > Material Management > Material Master > Material > Change*. For more information about Changing Material Master, refer to the help documentation of SAP ERP 6.0 at http://help.sap.com🔗 > *SAP ERP > SAP ERP 6.0 > Application Help*.

Prerequisites

The application rules for spot and AO contracts are enabled in Business Rule Framework plus (BRFplus).

> i Note
>
> This is an optional setting and needed only if you want to mark all the loads received in a particular plant for spot or AO.

Features

- You create a load data capture object for the spot or AO commodity.
  For step-by-step procedure, see Creating Load Data Capture Objects [page 133].
- You mark the application document for spot or AO in Manual Application Workcenter.
  For step-by-step procedure, see Marking Application Documents in Manual Application Workcenter [page 135]
- When an LDC is released and a CAD process is determined for Spot or Accumulate and Own Contract Request, the system generates a dual-booking by creating the following documents:
  - Goods receipt in physical Plant/Storage Location
  - Goods issue in obligations Plant/Storage Location
    As a result, the status of the Commingled application document changes to *Awaiting for Spot* status.
- When an LDC is released and a PAD process is determined for Spot or Accumulate and Own Contract Request, the system automatically generates the following logistics documents:
  - Purchase Order
  - Inbound Delivery
  - Goods Receipt

  As a result, the status of the Purchase application document changes to *Awaiting for Spot* status.
- You generate the spot or AO contract using the Spot Monitor.
  For step-by-step procedure, see Generating Contracts in Spot Monitor [page 136]
  After executing the Spot Monitor, note the following differences:
  - For a PAD, a link is created between Contract and Logistics documents
  - For a CAD, the set of logistics documents are generated during the application process, therefore creating:
    - Purchase Order
    - Inbound Delivery
    - Goods Receipt

You can use the following transactions to handle spot or AO commodities:

- *Maintain LDC* (`/ACCGO/UIS_WC`)
  Using this transaction, you can create a load data capture (LDC) object for a spot or an AO commodity received.
  In this transaction, you can create an LDC object in which you can define the details for relevant spot or AO commodity.
  The system applies the default discount premium quality schedule (DPQS) for the TSW location.
- *Manual Application Workcenter* (`/ACCGO/MWC`)

An application document with unassigned status can be marked for spot or AO manually by using the commingled node in Manual Application Workcenter.

- *Spot Monitor* (`/ACCGO/SPOT_MONITOR`)
  You need to execute the *Spot Monitor* to send the spot or AO contract request either to the contract creation or change request in the third party trading system (3PT), or to trigger the contract creation and update process within the ERP system.

  > i Note
  >
  > The system applies both the CAD as well as PAD processes to the newly generated contracts after the Spot Monitor is executed.

9.5.1 Spot Purchase and Accumulate to Own

Use

You use this process to handle the commodities received as spot or accumulate to own (AO).

Process

The process for spot or AO takes place as follows:

- You create a load data capture object for the spot or AO commodity.
  For step-by-step procedure, see Creating Load Data Capture Objects [page 133].
- You mark the application document for spot or AO in Manual Application Workcenter.
  For step-by-step procedure, see Marking Application Documents in Manual Application Workcenter [page 135]
- You generate the spot or AO contract using the Spot Monitor.
  For step-by-step procedure, see Generating Contracts in Spot Monitor [page 136]
- You send the spot or AO contract for settlement by setting the contract to *Ready to Price*.
  For step-by-step procedure, see Setting Contracts to Ready to Price [page 137]

9.5.1.1   Creating Load Data Capture Objects

Prerequisites

You are authorized to work in the Load Data Capture (LDC).

Context

You use this procedure to create load data capture (LDC) objects for spot or accumulate to own (AO) in the Load Data Capture (LDC).

Procedure

1. On the *SAP Easy Access* screen, choose ▎▶ *Agricultural Contract Management* ❯ *Load Data Capture* ❯ *Maintain LDC* ▎.

   You can also execute the transaction code **/ACCGO/UIS_WC**.

   The *Load Data Capture - Maintain* screen appears.

2. In the dialog structure, choose ▎▶ *Create LDC Object* ▎.

   The *Create Load Data Capture Object* screen appears.

3. Enter the values in the following mandatory fields:

   ○ *Application Instructions*
     Select **05 Regular Spot** or **06 Accumulate to Own**.

   ○ *LDC Type*
     Select **Incoming** or **Outgoing**.

   ○ *Mode of Transport*
     Select one from:

       ○ **01 Road**

       ○ **02 Rail**

       ○ **03 Sea**

       ○ **04 Inland Waterway**

       ○ **05 Air**

       ○ **06 Postal Service**

       ○ **90 TSW - Not Applicable**

   ○ *Event*
     Select **Load** or **Unload**.

   ○ *Event Location*
     Select a TSW location using the search help provided.

   ○ *Material*
     Select a material, such as corn, wheat and so on, using the search help provided.

4. Choose 🌐.

   In the next screen, a new row for this LDC object is created. At this stage, the object is created only temporarily as '$1' is displayed in the *LDC ID* field.

5. Click the linked text '$1' which jumps to the detailed screen.

6. Enter the required information on the *Event Details* and *Weights Details* tabs.

7. Choose 💾.

   The system updates the *LDC ID* field from the temporary number '$1' to a new ID number.

8. To check the log, choose ![icon].

9.5.1.2 Marking Application Documents in Manual Application Workcenter

Prerequisites

You are authorized to work in the Manual Application Workcenter (MAW).

Context

You use this procedure to mark the application documents for spot or accumulate to own (AO) in the Manual Application Workcenter (MAW).

Procedure

1. On the *SAP Easy Access* screen, choose ▶ *Agricultural Contract Management* > *Contract Application* > *Manual Application Workcenter* ▶.

   You can also execute the transaction code **/ACCGO/MWC**.

   The *Manual Application Workcenter* screen appears.

2. In the dialog structure, choose ▶ *Application Workcenter* > *Contract Application* ▶.

   The *Contract Application* screen appears.

3. Search the relevant documents for which you want to mark for spot or AO by specifying the *Application Document* number.

   To make your search more precise, you can also specify other fields, such as:
   - *Application Document Type*
   - *Document Date*
   - *LDC Object ID*
   - *LDC Group ID*
   - *Purchase Order*
   - *Nomination Key*

4. Choose ![icon].

   Based on the selection criteria specified, the selected documents are displayed under the *Contract Application Documents* area at the top half of the screen.

5. Under the *Contract Application Documents* area, select one or more line items with *Ready To Apply* status.

6. Under the 🖹 button in the ALV grid, choose *Accumulate to Own Contract Request* or *Spot Contract Request*.

   The status of the line item changes to *Awaiting for Spot / AO*.

Results

You have marked the application document to spot or AO.

9.5.1.3   Generating Contracts in Spot Monitor

Prerequisites

The contract creation within the SAP ERP system takes place only when the switch for third party trading system (3PT) integration is off.

Context

You can use this procedure to generate spot or accumulate to own (AO) contracts as well as to monitor these contracts using the *Spot Monitor*.

The functions offered by the *Spot Monitor* are realized by the report *Spot / Accumulate to Own Trade Requests* (program `/ACCGO/CAS_SPOT_MONITOR`).

Procedure

1. On the *SAP Easy Access* screen, choose ▐▶ *Agricultural Contract Management* ❯ *Contract Application* ❯ *Spot Monitor* ❯.

   You can also execute the transaction code **/ACCGO/SPOT_MONITOR**.

   The selection screen for the report *Spot / Accumulate to Own Trade Requests* appears.

2. To search the relevant documents, enter the data in the *Header Information* block.

   The following fields are available:

   ○ *Vendor*

- ○ *Plant*
- ○ *Material*
- ○ *Document Date*
- ○ *Mode of Transport*

3. Depending on the request you want, choose the options as follows in the *Spot Scenario Selection* block:

- ○ For creation of spot contracts:
  Mark the *Simple Spot* radio button and the *Contract Create/Change* checkbox.
- ○ For creation of AO contracts:
  Mark the *Accumulate to Own Create/Edit* radio button and the *Contract Create/Change* checkbox.

4. Choose 🕐.

   The creation of contracts is triggered in the background and the *Display logs* screen, in which you can view the processing details, is displayed.

Results

The result varies based on the integration scenario as follows:

- SAP ERP system only:
  Creation or change of spot or AO contracts is processed only in SAP ERP system.
- Third party system is connected to SAP ERP system:
  The request for creation or change of spot or AO contracts is sent from the SAP ERP system to the third party trading system (3PT) via the SAP PI system.

Next Steps

- For more information on the 3PT integration, see .
- For more information on the PI Content that is supported as part of *SAP Agricultural Contract Management*, see .

9.5.1.4 Setting Contracts to Ready to Price

Use

You use this procedure to set the accumulate to own (AO) contracts to *Ready to Price* indicator in the Manual Application Workcenter (MAW).

To make an AO contract available for pricing, the following two steps need to be done:

1. *Ready to Price* indicator is marked
2. *Approval* indicator is marked

Prerequisites

You are authorized to work in the Manual Application Workcenter.

Procedure

Setting Ready to Price Indicator

1. On the *SAP Easy Access* screen, choose ▷ *Agricultural Contract Management* > *Contract Application* > *Manual Application Workcenter* ◁.
   You can also execute the transaction code `/ACCGO/MWC`.
   The *Manual Application Workcenter* screen appears.

2. In the dialog structure, choose ▷ *Application Workcenter* > *Set Ready to Price* ◁.
   The *Set Ready to Price* screen appears.

3. Search the relevant AO contract by specifying the *Trading Contract* number.
   You can also specify other fields in the *Set Price for Spot - Accumulate to Own* block.

4. Choose 🕐.
   Based on the selection criteria specified, the selected contracts are displayed in the list.

5. Select a contract.

   > **i Note**
   >
   > You can only select one contract.

6. Press the 💲 button.
   The checkbox in the *Ready to Price* column for the selected contract is marked.

Setting Approval Indicator

1. On the *SAP Easy Access* screen, choose ▷ *Agricultural Contract Management* > *Contract Application* > *Manual Application Workcenter* ◁.
   You can also execute the transaction code `/ACCGO/MWC`.
   The *Manual Application Workcenter* screen appears.

2. In the dialog structure, choose ▷ *Application Workcenter* > *Set Ready to Price* ◁.
   The *Set Ready to Price* screen appears.

3. Search the relevant AO contract by specifying the *Trading Contract* number. You can also specify other fields in the *Set Price for Spot - Accumulate to Own* block.

4. Choose 🕐.
   Based on the selection criteria specified, the selected contracts are displayed in the list.

5. Select a contract for which you want to mark the *Approval* checkbox.

6. Press the ✅ button.
   The checkbox in the *Approval* column for the selected contract is marked and the traffic light in the *Sts Lights* column changes from 🔴⚪⚪ to ⚪⚪🟩.

9.5.2 In Store Sales and Purchase

In a scenario where you want to sell the goods and the customer wants to store the goods, you can use the *Application Instruction 30 In Store Sales*. This functionality combines the steps to create LDC for a Sales scenario followed by *Spot Purchase and Accumulate to Own* scenario. As a result, it triggers the creation of documents related to both the sale and storage of the goods.

If your implementation scenario uses a third party trading system, then you can use *In Store Purchase*. Here, you can select the application instruction *03 Existing Contract* or *04 Open Contract*. However, ensure you select the third party plant. The system then creates two application documents, Accrual Application Document and Purchase Application Document. In a normal purchase scenario, only the Purchase Application Document is created.

9.5.3 PAD and CAD Spot Reversal

Use

You can also reverse a Spot Contract process for both CAD and PAD application documents.

Process

PAD Spot Reversal

- You trigger reversal of a PAD document that was applied to a Spot Contract.
- The document changes its status to **Ready to Apply**. This status allows you to choose another contract or trigger an LDC Reversal. For information about LDC Reversal, see Orchestration Framework Automation [page 111]

CAD Spot Reversal

- You trigger reversal of a CAD document that was applied to a Spot Contract.
- The document changes its status to **Ready to Apply**. This status allows you to choose another contract, but will not allow an LDC reversal. The reason for that is the logistical documents that were generated during the contract application process of CADs.
- To trigger an LDC reversal for a CAD Spot Contract, change the status of the CAD document from *Ready to apply* to *Unassigned*.
- You can now trigger the reversal of all logistical documents created during application, and run the LDC reversal process.

9.6 Commingled Loads

Use

You use this function to handle commingled loads in *SAP Agricultural Contract Management*.

When the firm accepts a commodity from a counterparty (owner) for storage at the firm's location, but does not purchase it, the firm must keep a record of such commodity.

This kind of obligated quantity is called 'commingled load', as it is stored in the same location as the firm's own inventory and its quantity as well as grade and quality characteristics may become indistinguishable from other inventory.

The firm must ensure that a commingled load that is stored on its site is available for retrieval by its owner at the same or better quality as when it was delivered to the firm's site.

There may be a fee associated with the storage of the stock and the quantity may or may not be purchased by the firm from the owner.

Using this function, you can keep track of movements associated with commingled loads and manage their contracts.

Features

Using this function, you can do the following:

- Capture the load data based on the warehouse number and type using the storage programs
- Search commingled application documents based on the warehouse number and type
- Change the status of a commingled obligation load from one status to another, for example, from *Applied* to *Unapplied*
- Record the dates associated with status changes to a commingled obligation load
- Assign a commingled quantity to a storage program
- Change ownership of a commingled obligation load
- Exclude a commingled quantity from the firm's inventory quantity
- Calculate commingled quantities using the storage programs
- Manually calculate a storage fee for a commingled quantity using the storage programs
- Send a commingled quantity information to a third party trading system (3PT)
- Control whether the negative storage location is to be considered for Exposure Management.

> **i Note**
>
> As a part of ACM-CM integration which is realized as of *SAP Agricultural Contract Management 2.0*, an integration of risk exposure function with the Commingled Loads (ACM Core) scenario has been enabled.
>
> You can define the exposure relevancy per negative storage location in Customizing for ▶ *Logistics - General* ❭ *Global Trade Management* ❭ *Agricultural Contract Management* ❭ *Contract Application* ❭ *Commingled Stock* ❭ *Maintain Storage Location for Negative Posting* ❭.

> For more information, see Integration with SAP Commodity Management [page 63] and Exposure Management [page 71].

More Information

For more information, see Possible Third Party Integration [page 220].

9.6.1 Commingled Load Entry and Management

Use

The commingled load information is captured in the same manner as other load data. This includes the capture of gross quantity, quality characteristics, location, mode of transport and so on.

In addition, the load must be identified as commingled stock. Once it is identified as such, a storage program can be assigned during the data capture.

Subsequently, the load quantity is designated with a warehouse for storage, so that a receipt can be issued to the owner.

Process

Manual Application Workcenter

You use the Manual Application Workcenter (MAW) to perform the commingled stock entry and management process as follows:

- Search the application documents for commingled load
  For more information, see Displaying Application Documents [page 143].
- Assign the relevant commingled application documents to a contract
  For more information, see Assignment of Application Documents to Contract [page 144].
- Reverse the assignment of commingled application documents to the contract
  For more information, see Reversing Assignment of Application Document to Contract [page 146].
- Assign a storage program to the commingled application documents
  For more information, see Assignment of Storage Program to Application Documents [page 147].
- Change the assignment of storage program
  For more information, see Changing Storage Program Assignment. [page 148]
- Create, change and cancel an warehouse receipt that is issued to the owner of the commingled load
  For more information, see Processing Warehouse Receipts [page 149].
- Remove the application document from storage program and set back to the unassigned status
  For more information, see Removing Application Documents from Storage Program [page 152].
- Split the ownership of the load to multiple vendors
  For more information, see Splitting Vendor Ownership [page 153].

- Create the load out application documents when the load is returned to its owner
For more information, see Creating Load Out Application Documents [page 159].

Storage Program

Together with additional business rules, a storage program definition is used to determine its relation to a combination of plant and material during the load data capture.

Although calculation and settlement of storage fees are currently not supported in *SAP Agricultural Contract Management*, this storage program configuration can be used to populate the invoice information for storage of commingled loads for periodic billing to the vendor.

For more information, see Creating Storage Program Types [page 162].

9.6.1.1 Processing Commingled Stocks in Manual Application Workcenter

Use

Under this section, a set of step-by-step procedures is provided.

You use these procedures to process commingled stocks in the Manual Application Workcenter (MAW).

Prerequisites

- You are authorized to work in the Manual Application Workcenter.
- You have maintained the storage locations in Customizing for ▌▶ *Logistics - General* ❯ *Global Trade Management* ❯ *Agricultural Contract Management* ❯ *Contract Application* ❯ *Commingled Stock* ❯ *Maintain Storage Location for Negative Posting* ❯.
- You have maintained the movement types in Customizing for ▌▶ *Logistics - General* ❯ *Global Trade Management* ❯ *Agricultural Contract Management* ❯ *Contract Application* ❯ *Commingled Stock* ❯ *Maintain Movement Types* ❯.
- You have maintained the required master data settings in the Business Rule Framework plus.

Procedure

Under this section, the following step-by-step procedures are provided:

- Displaying Application Documents [page 143]
- Assignment of Application Documents to Contract [page 144]
- Reversing Assignment of Application Document to Contract [page 146]
- Assignment of Storage Program to Application Documents [page 147]

9.6.1.1.1 Displaying Application Documents

Prerequisites

- You are authorized to work in the Manual Application Workcenter.
- You have maintained the storage locations in Customizing for ▶ *Logistics - General* ❯ *Global Trade Management* ❯ *Agricultural Contract Management* ❯ *Contract Application* ❯ *Commingled Stock* ❯ *Maintain Storage Location for Negative Posting* ❮.
- You have maintained the movement types in Customizing for ▶ *Logistics - General* ❯ *Global Trade Management* ❯ *Agricultural Contract Management* ❯ *Contract Application* ❯ *Commingled Stock* ❯ *Maintain Movement Types* ❮.
- You have maintained the required master data settings in the Business Rule Framework plus.

Context

You can use this procedure to search and display the application documents for commingled loads in the Manual Application Workcenter (MAW).

Procedure

1. On the *SAP Easy Access* screen, choose ▶ *Agricultural Contract Management* ❯ *Contract Application* ❯ *Manual Application Workcenter* ❮.

   You can also execute the transaction code `/ACCGO/MWC`.

   The *Manual Application Workcenter* screen appears.

2. In the dialog structure, choose ▶ *Application Workcenter* ❯ *Commingled* ❮.

   The *Commingled* screen appears.

3. Search the relevant documents for commingled stock by specifying the *Application Document* number. You can also specify other fields, such as the following:

- ○ *Application Document Type*
- ○ *Document Date*
- ○ *LDC Object ID*
- ○ *LDC Group ID*
- ○ *Purchase Order*
- ○ *Nomination Key*
- ○ *Application Instruction*
- ○ *Original Application Instruction*

4. Choose ⏱.

> **i Note**
>
> To view all historical transactions for the selected application document on the detailed screen, select the *Show History* checkbox. If it is not selected, only the actionable line items are displayed.

> **i Note**
>
> To convert application documents with different units of measure to a common unit of measure, choose a default unit of measure. You can switch between trade and other relevant material-related units of measure for contract application data.

Results

Based on the selection criteria specified, the selected commingled application documents are displayed under the *Contract Application Documents* area at the top half of the screen.

9.6.1.1.2 Assignment of Application Documents to Contract

Prerequisites

- You are authorized to work in the Manual Application Workcenter (MAW).
- You have maintained the storage locations in Customizing for ▮▶ *Logistics - General* ❯ *Global Trade Management* ❯ *Agricultural Contract Management* ❯ *Contract Application* ❯ *Commingled Stock* ❯ *Maintain Storage Location for Negative Posting* ▮.
- You have maintained the movement types in Customizing for ▮▶ *Logistics - General* ❯ *Global Trade Management* ❯ *Agricultural Contract Management* ❯ *Contract Application* ❯ *Commingled Stock* ❯ *Maintain Movement Types* ▮.

- You have maintained the required master data settings in the Business Rule Framework plus.
- You are in the Manual Application Workcenter (MAW) and commingled application documents have been searched and available in MAW.
  For more information, see Displaying Application Documents [page 143].

Context

You use this procedure to assign the application documents for commingled loads to contract.

Procedure

1. Under the *Contract Application Documents* area in MAW, select one or more line items to assign the contract.

   > **i Note**
   >
   > The selected line item must have an open quantity available with title transfer at destination.

2. Change the value in the *Picked Quantity* field, if necessary.

3. Under the 🔶 button in the ALV grid, choose *Manual Selection of Contract* or *Propose Contracts*.

4. If you choose *Propose Contracts*, enter the value in the *Purchasing Organization* and *Purchasing Group* fields in the popup displayed.

   If you choose *Manual Selection of Contract*, enter the value in the *Trading Contract* field.

5. Choose ✅.

6. For *Propose Contracts*, a list of contracts is displayed. Select a contract and choose ✅.

   For *Manual Selection of Contract*, the contract you specified is displayed. Select the contract and choose ✅.

Results

A new line item is created with the status *Finally Applied* for both full and partial quantity applications.

9.6.1.1.3 Reversing Assignment of Application Document to Contract

Prerequisites

- You are authorized to work in the Manual Application Workcenter (MAW).
- You have maintained the storage locations in Customizing for ▌▶ *Logistics - General* ❭ *Global Trade Management* ❭ *Agricultural Contract Management* ❭ *Contract Application* ❭ *Commingled Stock* ❭ *Maintain Storage Location for Negative Posting* ❭.
- You have maintained the movement types in Customizing for ▌▶ *Logistics - General* ❭ *Global Trade Management* ❭ *Agricultural Contract Management* ❭ *Contract Application* ❭ *Commingled Stock* ❭ *Maintain Movement Types* ❭.
- You have maintained the required master data settings in the Business Rule Framework plus.
- You are in the Manual Application Workcenter (MAW) and an assignment of a commingled application document to a contract for which you want to reverse is available in MAW.
  For more information, see Displaying Application Documents [page 143] and Assignment of Application Documents to Contract [page 144].

Context

You use this procedure to reverse the assignment of a commingled application document to a contract.

Procedure

1. Under the *Contract Application Documents* area in MAW, select a line item to unassign the contract.

   > **i** Note
   >
   > Partial quantities are not allowed as it is impossible to reverse partial quantities.

2. Double click the line item. The details of line item are displayed under the *Contract Application Data* area.

3. In the ALV grid under the *Contract Application Data* area, press the 🔄 button.

Results

The assignment of the application document to the contract is now reversed.

9.6.1.1.4 Assignment of Storage Program to Application Documents

Prerequisites

- You are authorized to work in the Manual Application Workcenter (MAW).
- You have maintained the storage locations in Customizing for ▶ *Logistics - General* ❯ *Global Trade Management* ❯ *Agricultural Contract Management* ❯ *Contract Application* ❯ *Commingled Stock* ❯ *Maintain Storage Location for Negative Posting* ❯.
- You have maintained the movement types in Customizing for ▶ *Logistics - General* ❯ *Global Trade Management* ❯ *Agricultural Contract Management* ❯ *Contract Application* ❯ *Commingled Stock* ❯ *Maintain Movement Types* ❯.
- You have maintained the required master data settings in the Business Rule Framework plus.
- You are in the Manual Application Workcenter (MAW) and a commingled application document with *Unassigned* status is available in MAW.
  For more information, see the following:
    - Displaying Application Document [page 143]
    - Assignment of Application Document to Contract [page 144]
    - Reversing Assignment of Application Document to Contract [page 146]

Context

You use this procedure to assign a storage program to the commingled application documents.

Procedure

1. Under the *Contract Application Documents* area in MAW, select one or more line items which have the status *Unassigned*.
2. Under the ▦ button in the ALV grid, choose *Assign Program*.

   The *Assign Program* popup appears.
3. In the popup displayed, specify the following *Storage Details*:
    - *Program Type* (mandatory)
      Choose a program type from the dropdown list.
    - *Storage Start Date* (mandatory)
      The system defaults the current date which you can override. Note that the storage start date specified must fall between the posting date and the current system date.

4. Choose ✔.

Results

A new line item is created with the following details:

- The *Storage* status is assigned
- A storage program is assigned
- The delivery quantity equals to the picked quantity
- The delivery quantity (equals to the picked quantity) is reduced from the selected line item

Next Steps

If you want to change the assignment of storage program, see Changing Storage Program Assignment [page 148].

9.6.1.1.5 Changing Storage Program Assignment

Prerequisites

- You are authorized to work in the Manual Application Workcenter (MAW).
- You have maintained the storage locations in Customizing for ▶ *Logistics - General* ❯ *Global Trade Management* ❯ *Agricultural Contract Management* ❯ *Contract Application* ❯ *Commingled Stock* ❯ *Maintain Storage Location for Negative Posting* ❯.
- You have maintained the movement types in Customizing for ▶ *Logistics - General* ❯ *Global Trade Management* ❯ *Agricultural Contract Management* ❯ *Contract Application* ❯ *Commingled Stock* ❯ *Maintain Movement Types* ❯.
- You have maintained the required master data settings in the Business Rule Framework plus.
- You are in the Manual Application Workcenter (MAW) and commingled application documents with open quantity are available in MAW.
  For more information on how to search the documents in MAW, see Displaying Application Documents [page 143].

Context

You use this procedure to change the storage program assignment to a commingled application document.

Procedure

1. Under the *Contract Application Documents* area in MAW, select one or more line items which have the open quantity available.

   The system defaults the entire quantity in the *Picked Quantity* field. The value in this field can be overridden, if desired.

2. Under the ▦ button in the ALV grid, choose *Assign Program*.

   The *Assign Program* popup appears.

3. In the popup displayed, specify the following *Storage Details*:
   - *Program Type* (mandatory)
     Choose another program type from the dropdown list.
   - *Storage Start Date* (mandatory)
     The system defaults the current date which you can override. Note that the storage start date specified must fall between the posting date and the current system date.

4. Choose ✔.

Results

A new line item is created with the following details:

- The specified new storage program is assigned
- The picked quantity is available

9.6.1.1.6   Processing Warehouse Receipts

Use

A warehouse receipt (WRH) is a document that provides proof of ownership of commodities that are stored in a warehouse, vault, or depository for safekeeping. A farmer can request a warehouse receipt to be issued for commingled stocks. Once can generate these receipts for one or more application documents.

Note that you can generate a warehouse receipt only for an assigned application document. You can also verify if you can generate a warehouse receipt for an application document by checking the status of the document. The status of such documents will be green, which denotes that the document is in *Initial Warehouse Receipt* status.

There are two types of warehouse receipt as follows:

- **Negotiable Warehouse Receipt** is a title document that is issued by a licensed warehouse to identify ownership of a stored commodity. You can endorse and sell this document. However, you cannot change the quantity of the goods mentioned in the document.
- **Non-Negotiable Warehouse Receipt** is not a title document and does not provide ownership of the commodity. This type of receipt allows a change of the quantity.

Prerequisites

- You are authorized to work in the Manual Application Workcenter (MAW).
- You have maintained the number ranges in Customizing for ▐▶ *Logistics - General* ❯ *Global Trade Management* ❯ *Agricultural Contract Management* ❯ *Warehouse Receipts* ❯ *Contract Application* ❯ *Maintain Range Numbers for Document Types.* ❯
- You have maintained the document types in Customizing for *Logistics - General Global Trade Management Agricultural Contract Management Contract Application Warehouse Receipts Maintain Document Types*
- You have maintained the storage locations in Customizing for ▐▶ *Logistics - General* ❯ *Global Trade Management* ❯ *Agricultural Contract Management* ❯ *Contract Application* ❯ *Commingled Stock* ❯ *Maintain Storage Location for Negative Posting* ❯.
- You have maintained the movement types in Customizing for ▐▶ *Logistics - General* ❯ *Global Trade Management* ❯ *Agricultural Contract Management* ❯ *Contract Application* ❯ *Commingled Stock* ❯ *Maintain Movement Types* ❯.
- You have maintained the required master data settings in the Business Rule Framework plus.

Procedure

Creating Warehouse Receipts

1. On the *SAP Easy Access* screen, choose ▐▶ *Agricultural Contract Management* ❯ *Contract Application* ❯ *Manual Application Workcenter* ❯.
   You can also execute the transaction code `/ACCGO/MWC`.
   The *Manual Application Workcenter* screen appears.
2. In the dialog structure, choose ▐▶ *Application Workcenter* ❯ *Commingled* ❯.
   The *Commingled* screen appears.
3. Search the relevant documents for issuing warehouse receipts by specifying the *Application Document* number. You can also specify other fields, such as:
   - *Application Document Type*
   - *Material*
   - *Plant*
   - *Warehouse Receipt Number*
4. Choose ⊕.

> **i Note**
>
> Mark the *Show History* checkbox, if you want to view all historical transactions for the selected application document on the detailed screen. If it is not marked, only the actionable line items are displayed.

Based on the selection criteria specified, the selected documents are displayed under the *Contract Application Documents* area at the top half of the screen.

5. Under the *Contract Application Documents* area, select one or more line items for which you need to issue warehouse receipts.

6. Press the 📒 button.

7. In the *Warehouse Receipt* popup screen, select the *WRH Type*, assign a *WRH Number*, and select an *Obligation Type*.

8. Choose ✔.

The successful message appears.

You can see the details of the receipt in the *Warehouse Receipt* tab under *Application Workcenter*. This screen displays the details under the following tabs -- *References, Analysis, Weights, Dates*, and *Admin Data* of the selected receipt or document.

You can also create collective warehouse receipts for multiple application documents; however ensure all the documents have the same vendor.

Cancelling Warehouse Receipts

1. Under the *Contract Application Documents* area in MAW, select one line item for which you want to cancel the warehouse receipt.

2. Choose 🗑.
   The *Cancel Warehouse Receipt* popup appears.

3. Choose the *Yes* button to confirm the cancel action.

Changing Vendor for Warehouse Receipt

1. Under the *Contract Application Documents* area in MAW, select a line item to which you want to change the vendor.

   > **i Note**
   >
   > Only *Negotiable* warehouse receipts are applicable for vendor change.

2. Under the ✏ button in the ALV grid, choose *Vendor*.
   The *Change Vendor* popup appears.

3. In the popup displayed, enter the *Vendor* using the input help.

4. Choose ✔.
   The message popup appears.

5. Press the *Yes* button to confirm.

As a result, the assigned vendor is now changed.

Changing Quantity of Warehouse Receipt

1. Under the *Contract Application Documents* area in MAW, select a line item to which you want to change the quantity.

> **i Note**
>
> Only *Non-negotiable* warehouse receipts are applicable for quantity change.

2. Choose the ✏ button in the ALV grid.
   The *Picked Quantity* field changes to edit mode and you can change the quantity. Ensure you choose a quantity which is lesser than the open warehouse quantity.

3. Choose 💾 which is beside the *Change Warehouse Receipt* button.

The successful message appears.

As a result, the quantity is now changed. When a quantity is changed, the system cancels the current receipt and creates a new receipt with the changed quantity.

> **i Note**
>
> The UOM of the base material should be the same.

You can see the details of the various versions of the receipts created during this whole process in the *Application Document Details* screen. The status column shows the various line items with different statuses according to the process. The following are the statuses shown in this column:

- Green - Initial Warehouse Receipt
- Red - Cancel/close Warehouse Receipt
- Yellow - Warehouse Receipted

You can also cancel the operation by choosing the *Refresh* button or double-click another line item in the Main Item list.

9.6.1.1.7   Removing Application Documents from Storage Program

Prerequisites

- You are authorized to work in the Manual Application Workcenter (MAW).
- You have maintained the storage locations in Customizing for ▶ *Logistics - General* ❯ *Global Trade Management* ❯ *Agricultural Contract Management* ❯ *Contract Application* ❯ *Commingled Stock* ❯ *Maintain Storage Location for Negative Posting* ▶.
- You have maintained the movement types in Customizing for ▶ *Logistics - General* ❯ *Global Trade Management* ❯ *Agricultural Contract Management* ❯ *Contract Application* ❯ *Commingled Stock* ❯ *Maintain Movement Types* ▶.
- You have maintained the required master data settings in the Business Rule Framework plus.
- You are in the Manual Application Workcenter (MAW) and a commingled application document with open quantity that is assigned to a storage program is available in MAW.

For more information, see the following:

Context

You use this procedure to remove the commingled application documents from the assigned storage program and set the status back to *Unassigned*.

Procedure

1. Under the *Contract Application Documents* area in MAW, select one or more line items which have the open quantity available.

   The system defaults the entire quantity in the *Picked Quantity* field. The value in this field can be overridden, if desired.

2. Under the ⊞ button in the ALV grid, choose *Move to Unassigned*.

   The *Unassign Date* popup appears.

3. In the popup displayed, specify the *Unassign Start Date*.

   The system defaults the current date which you can override. Note that the unassign start date specified must fall between the posting date and the current system date.

4. Choose ✔.

Results

A new line item is created with the following details:

- The *Unassigned* status is assigned
- The open quantity is still available
- The open quantity can be moved to the storage program or purchased

9.6.1.1.8   Splitting Vendor Ownership

Use

Incoming loads can be split manually to multiple vendors in the Manual Application Workcenter (MAW).

Vendor split allows you to do the following:

- Split 100% of the ownership from one vendor to multiple vendors
- Maintain the percentage of ownership for the original vendor and split it to multiple vendors
- Mass split multiple application documents that have the same vendor, plant, and material. The total quantity is split and proportionally divided to each document item.

Prerequisites

- You are authorized to work in the Manual Application Workcenter (MAW).
- You have maintained the storage locations in Customizing for ▶ *Logistics - General* ❯ *Global Trade Management* ❯ *Agricultural Contract Management* ❯ *Contract Application* ❯ *Commingled Stock* ❯ *Maintain Storage Location for Negative Posting* ❯.
- You have maintained the movement types in Customizing for ▶ *Logistics - General* ❯ *Global Trade Management* ❯ *Agricultural Contract Management* ❯ *Contract Application* ❯ *Commingled Stock* ❯ *Maintain Movement Types* ❯.
- You have maintained the required master data settings in the Business Rule Framework plus.

Procedure

Commingled Scenario (CAD)

1. On the *SAP Easy Access* screen, choose ▶ *Agricultural Contract Management* ❯ *Contract Application* ❯ *Manual Application Workcenter* ❯.
   You can also execute the transaction code `/ACCGO/MWC`.
   The *Manual Application Workcenter* screen appears.

2. In the dialog structure, choose ▶ *Application Workcenter* ❯ *Commingled* ❯.
   The *Commingled* screen appears.

3. Search the relevant documents for commingled stock by specifying the *Application Document* number. You can also specify the following fields:
   - *Application Document Type*
   - *LDC Group ID*
   - *Vendor*
   - *Storage Program Type*
   - *Material*
   - *Plant*

4. Choose 🕒.

   > **i Note**
   >
   > To view all historical transactions for the selected application document, select the *Show History* checkbox. If this checkbox is not selected, only the actionable line items are displayed.

5. Under the *Contract Application Documents* screen area, select a line item to split the ownership.

> **i Note**
>
> o The selected line item must have an open quantity available with title transfer at destination.
> o The entire quantity is split as partial quantity is not allowed.

6. Under the ![icon] button in the ALV grid, choose *Split to Vendors*.
   The *Split Screen* popup appears.

7. Insert one or more rows by choosing ![icon].

8. Specify one or more vendors for which you want to split the ownership. Specify whether the split is by percentage or quantity.

> **⁘ Example**
>
> You want to split the load (700,000LB) for vendor 6000000001 (Minneapolis) to vendor 6000000005 (Kansas City) with 30% and vendor 6000000008 (Atlanta) with 20%.
>
> | Vendor | Ven Split % | Split Qty | Unit |
> | --- | --- | --- | --- |
> | 6000000001 (Minneapolis) | 50,00 | 350,00 | LB |
> | 6000000005 (Kansas City) | 30,00 | 210,00 | LB |
> | 6000000008 (Atlanta) | 20,00 | 140,00 | LB |

9. Choose ✔.

Purchase Scenario (PAD)

1. In the *Manual Application Workcenter* in the dialog structure, choose ▶ *Application Workcenter* ❭ *Contract Application* ❭.
   The *Contract Application* screen appears.

2. Search the relevant documents for commingled stock by specifying the *Application Document* number. You can also specify the following fields:
   o *Application Document Type*
   o *LDC Group ID*
   o *Vendor*
   o *Purchase Order*
   o *Material*
   o *Plant*

3. Choose ![icon].

4. Perform steps 4-9 from the Commingled Scenario (CAD).

Splitting Quantity to Contracts

Using the split function, you can also split a quantity into multiple contracts.

To do this, replace the steps 6 to 9 in the Commingled Scenario (CAD) with the following procedure:

1. Under the ⏷ button in the ALV grid, choose *Split Quantity into Contracts*.

2. In the *Trading Contract* field, enter more than one contract. Choose ✔.
   The specified contracts are displayed in the *List of Contracts* screen.

3. Select more than one contract and choose ✔.
   The *Split Screen* popup appears.

4. Split the quantity by specifying *Split %* (percentage) or *Split Qty* (quantity) across the selected contracts.
   Choose ✔.

9.6.1.1.9   Creating Storage Load Out

Prerequisites

- You are authorized to work in the Manual Application Workcenter (MAW).
- You have maintained the storage locations in Customizing for ▶ *Logistics - General* ❯ *Global Trade Management* ❯ *Agricultural Contract Management* ❯ *Contract Application* ❯ *Commingled Stock* ❯ *Maintain Storage Location for Negative Posting* ❰.
- You have maintained the movement types in Customizing for ▶ *Logistics - General* ❯ *Global Trade Management* ❯ *Agricultural Contract Management* ❯ *Contract Application* ❯ *Commingled Stock* ❯ *Maintain Movement Types* ❰.
- You have maintained the required master data settings in the Business Rule Framework plus.

Context

You use this procedure to create a request to load out a commingled load from the storage.

Load out is performed when the commodity received as a commingled load (un-owned stock) is returned to its owner.

Procedure

1. On the *SAP Easy Access* screen, choose ▶ *Agricultural Contract Management* ❯ *Contract Application* ❯ *Manual Application Workcenter* ❰.

   You can also execute the transaction code `/ACCGO/MWC`.

   The *Manual Application Workcenter* screen appears.

2. In the dialog structure, choose ▶ *Application Workcenter* ❯ *Commingled* ❯.

   The *Commingled* screen appears.

3. Search the relevant documents for commingled stock by specifying the *Application Document* number. You can also specify other fields, such as:
   - *Application Document Type*
   - *Document Date*
   - *LDC Object ID*
   - *LDC Group ID*
   - *Purchase Order*
   - *Nomination Key*

4. Choose ⊕.

   > **i Note**
   >
   > Mark the *Show History* checkbox, if you want to view all historical transactions for the selected application document on the detailed screen. If it is not marked, only the actionable line items are displayed.

   Based on the selection criteria specified, the selected documents are displayed under the *Contract Application Documents* area at the top half of the screen.

5. Select one or more line items for loaded out. Change the quantity, if necessary,

6. Press the ☖ button.

Results

Once the *Loaded Out* status is set, the application document is no longer an obligation or available for purchase.

9.6.1.1.10 Handling of Stored Goods

Use

The handling of stored goods is a set of activities you perform to receive goods for storage or to move goods between different storage agreements.

Process

1. In the *Load Data Capture Workcenter*, create an unload event representing incoming 3rd party goods for storage, or goods being stored at a 3rd party location.

2. When storing goods at a 3rd party location, the system automatically determines if the event location is a plant configured as a 3rd party storage location, and triggers the creation of the corresponding documents accordingly.
3. After releasing the load data capture event, the system generates one of the following corresponding application documents:
   - Commingled Application Document (CAD)
   - Load Out Application Document (LAD)
   - Accrual Application Document (AAD)
   - Match Out Application Document (MAD)

9.6.1.2 Load Out Match

Use

Load Out is a process performed when the commodity received as a commingled load (un-owned stock) is returned to its owner.

A Load Out may have one of the following scenarios:

Storage Scenario: The commodity is brought to the buyer by a vendor or customer and stored; however, the buyer may not purchase the load. The commodity will be loaded out at a later date to either the original (delivering) producer, or to their assignee.

Put-through Scenario: The buyer facilitates the transfer of material from an inbound vessel to an outbound vessel and charges a fee for the service. An example of this would be unloading (inbound) of multiple truckloads of grain, to loading (outbound) of the same quantity or quality of grain onto a barge or railcar.

Load Outs may occur from a different plant than where the load is stored.

The Load Out Matching feature helps you to match Load Out application documents (LAD, MAD) with stored goods application documents (CAD, AAD). In addition, it helps you to washout the obligation stock by identifying the corresponding unloads for the specific Load Out material and clearing off the quantity from the obligation stock. The following are the possible scenarios to clear out the residual stock:

- If there is remaining stored goods quantity, you can choose to keep it in storage or scrap it.
- When the load out quantity is greater than the stored quantity, you can choose either to sell out the residual quantity or to scrap it, in order to match the missing delivered quantity.
- When the stocks are stored at a 3rd party location and the load out quantity is greater, the match will be scrapped by the 3rd party location in order to match the missing delivered quantity or the option *Keep in Storage* is selected. In such a scenario, you can use the Accrual Application Document (AAD) and Match Application Document (MAD) while creating the LDC Objects.

Prerequisites

- You have implemented the *Changes in the Load Out Matching Process before Match* BAdI in Customizing under ▶ *Agricultural Contract Management* ❭ *Enhancements Using Business Add-Ins* ❭ *Contract Application* ❭ *Load Out Matching* ❰

Process

You use the Manual Application Workcenter to perform the Load Out Matching process as follows:

- Search the application documents for commingled load
  For more information, see Displaying Application Documents [page 143].
  Assign a storage program to the commingled application documents
  For more information, see Assignment of Application Documents to Contract [page 144].
  Create the storage load out using the application instruction Load Out (35) to return part of the stored goods to the vendor or owner.
  For more information, see Creating Load Out Application Documents [page 159].
  Find and match the load outs application documents with stored goods application documents using the Discount Premium Quality Schedule [page 22]. The Value schedule is used to get the Material Schedule to determine the filtered materials.

Result

The application documents are matched. You can choose to sell out or mark scrap the residual quantity once the application documents are matched. The other option available to handle residual quantity is the *Keep in Storage* which is used in 3rd Party scenarios.

9.6.1.2.1   Creating Load Out Application Documents

Prerequisites

You are authorized to work in the Load Data Capture (LDC).

Context

You use this procedure to create a load data capture object using the *Load Out* application instruction.

Procedure

1. On the *SAP Easy Access* screen, choose ▶ *Agricultural Contract Management* ❯ *Load Data Capture* ❯ *Maintain LDC* ❯.

   You can also execute the transaction code **/ACCGO/UIS_WC**.

The *Load Data Capture - Maintain* screen appears.

2. In the dialog structure, choose ▶ *Create LDC Object* ◣.

   The *Create Load Data Capture Object* screen appears.

3. Enter the values in the following mandatory fields:
   - *Application Instructions*
     Select **35 Load Out** .
   - *LDC Type*
     Select **Outgoing**.
   - *Mode of Transport*
     Select one from:
     - **01 Road**
     - **02 Rail**
     - **03 Sea**
     - **04 Inland Waterway**
     - **05 Air**
     - **06 Postal Service**
     - **90 TSW - Not Applicable**
   - *Event*
     Select **Unload**.
   - *Event Location*
     Select a TSW location using the search help provided.
   - *Material*
     Select a material, such as corn, wheat and so on, using the search help provided.

4. Choose 🔄.

   In the next screen, a new row for this LDC object is created. At this stage, the object is created only temporarily as "$1" is displayed in the *LDC ID* field.

5. Click the linked text "$1" which jumps to the detailed screen.

6. Enter the required information on the *Event Details* and *Weights Details* tabs.

7. Choose 💾.

   The system updates the *LDC ID* field from the temporary number "$1" to a new ID number.

8. To check the log, choose 📜.

Results

You have successfully created a new Load Out Application Document (LAD).

9.6.1.2.2 Matching Load Out Application Documents

Prerequisites

- You are authorized to work in the Manual Application Workcenter(MAW).
  You have maintained the storage locations in Customizing for ▶ *Logistics - General* ❯ *Global Trade Management* ❯ *Agricultural Contract Management* ❯ *Contract Application* ❯ *Commingled Stock* ❯ *Maintain Storage Location for Negative Posting* ❯.
  You have maintained the movement types in Customizing for ▶ *Logistics - General* ❯ *Global Trade Management* ❯ *Agricultural Contract Management* ❯ *Contract Application* ❯ *Commingled Stock* ❯ *Maintain Movement Types* ❯.
  You have maintained the required master data settings in the Business Rule Framework plus.

Context

You use this procedure to match Load Out Application Documents (LAD) with stored goods application documents (CAD).

Procedure

1. On the *SAP Easy Access* screen, choose ▶ *Agricultural Contract Management* ❯ *Contract Application* ❯ *Manual Application Workcenter* ❯.

   You can also execute the transaction code `/ACCGO/MWC`.

   The *Manual Application Workcenter* screen appears.

2. In the dialog structure, choose *Application Workcenter Load Out Matching* .

   The *Load Out Matching* screen appears. The default value in the *Display Options* is *Match Load Outs*.

3. Select the relevant *Value Schedule* and its *Version*. For more information on Value Schedule, see Discount Premium Quality Schedule [page 22].

4. Choose ⊕.

   The next screen displays a list of possible LAD items.

5. Select the required LAD and choose *Find Matches*.

   The *Find Matches* pop up box opens.

6. Select the application document number of the CAD or AAD to which you want to match the LAD or in the *Stored Goods App Documents* field using the input help and click *Choose Matches*.

The matched items is displayed under the section **Matches**. In this line item, along with the application document number and Load Out Item Quantity, you can see the Load Out Current Quantity of both the LAD and CAD items, which are adjusted by the DPQS Value Schedule.

In addition, the line item also displays the residual quantity of both CAD and LAD items. This is the result of matching the LAD and CAD.

7. Choose *Save Matches*.

8. In the popup, choose the required option between *Keep in Storage* and *Scrap* to determine how to clear out the residual stock.

9. Choose ✔.

Results

The status of the LAD item changes from *Ready to Match* to *Matched*. The status of the CAD item shows as *Loaded Out*.

9.6.1.3 Creating Storage Program Types

Prerequisites

- You have maintained the storage locations in Customizing for ▐▶ *Logistics - General* ▷ *Global Trade Management* ▷ *Agricultural Contract Management* ▷ *Contract Application* ▷ *Commingled Stock* ▷ *Maintain Storage Location for Negative Posting* ▐.

- You have maintained the movement types in Customizing for ▐▶ *Logistics - General* ▷ *Global Trade Management* ▷ *Agricultural Contract Management* ▷ *Contract Application* ▷ *Commingled Stock* ▷ *Maintain Movement Types* ▐.

Context

You can use this procedure to create storage program types.

Currently, the functions to calculate and settle the storage fees associated with commingled commodities are not supported in *SAP Agricultural Contract Management*. However, the solution does support the function to create a storage program type that can be associated with the quantities on a commingled application document. You can download these associations and manually calculate the fees.

Procedure

1. On the *SAP Easy Access* screen, choose ▌▶ *Agricultural Contract Management* ❯ *Contract Application* ❯ *Commingled Loads* ❯ *Maintain Storage Program Types* ❯.

   You can also execute the transaction code `/ACCGO/STORAGE_TYPE`.

   The *Change View "Storage Program Type": Overview* screen appears.

2. Click the *New Entries* button to make the *Storage Program Type* table editable.
3. Define the following fields in the table:
   ○ *Program Type*

   > **i Note**
   >
   > Define a unique program type.

   ○ *Description*
4. Choose 🖫.

Results

You have created a storage program type which can now be assigned to a storage location that is done in the Business Rule Framework plus as part of master data settings.

9.6.1.4   Creating Storage History Report

Prerequisites

- You have maintained the storage locations in Customizing for ▌▶ *Logistics - General* ❯ *Global Trade Management* ❯ *Agricultural Contract Management* ❯ *Contract Application* ❯ *Commingled Stock* ❯ *Maintain Storage Location for Negative Posting* ❯
- You have maintained the movement types in Customizing for ▌▶ *Logistics - General* ❯ *Global Trade Management* ❯ *Agricultural Contract Management* ❯ *Contract Application* ❯ *Commingled Stock* ❯ *Maintain Movement Types* ❯

Context

The CAD Storage History feature helps you to create a storage report which displays various details about an application document. For example, it will display the status, quantities, Moisture and so on. Note that this

report displays the unique characteristics of every application document based on the selection criteria. From this report you can also simulate a storage settlement even if you are not authorized to use the Storage Settlement Workcenter.

Once the report is run, the application documents are assigned either to an **Inventory Based Storage** or an **Unload Based Storage**. Inventory storage history refers to application documents that are assigned to inventory based storage agreement. To enable this kind of generation, you must ensure that the *Inventory Level Based Agreement* check box is selected in the Storage tab at the item detail level while creating a storage agreement.

The Unload based storage history refers to application documents that are assigned to unload based storage agreements. If the *Inventory Level Based Agreement* check box is **not** selected in the Storage tab at the item detail level, then this report runs in the background.

Procedure

1. On the SAP Easy Access screen, choose ▶ *Agricultural Contract Management* ❭ *Contract Application* ❭ *Commingled Loads* ❭ *CAD Storage History* ❭. You can also execute the transaction code `/ACCGO/ STRG_HIST`. The *Storage History Report* screen appears.

2. Select the *Application Document* number or the *Storage Agreement* number.

3. Choose ⊕.

10 Contract Settlement

Use

Agricultural commodities are traded in domestic and international commodities exchanges or markets at negotiated and mutually agreed upon prices. The price established for a purchase or sale is derived from price indices or price futures that are determined by typical market forces such as supply and demand, as well as market bias (speculation) and other dispositions, such as a trader's position in a particular commodity.

Contract settlement is an invoicing and billing pre-processor that consolidates multiple transactions against one or more contracts. It uses schedules and other terms specified on the contract to calculate or determine an adjusted price that is used to issue payment or perform customer billing. From a business process standpoint, settlement takes place just after application. The contract application that takes place between the contract and the application document is the basis on which settlement is initiated.

Trading contracts are the basis for all traded agricultural commodity purchases and sales. These specialized instruments specify the current or future pricing of the sale or purchase, delivery or shipment terms, the payment terms, and the terms that govern the logistical execution of the contract.

Trading contracts are not only the basis for trade execution; they also contain the legal terms and conditions that apply for financial settlement. Contracts specify a set of schedules and optionalities that represent monetary adjustments (a premium or discount) that may be applied to the base price to determine any payments or amount due. These monetary adjustments are frequently referred to as value adjustments.

Integration

The following are required for contract settlement process:

- All master data including vendor, customer, material group, unit of measure conversion and foreign currency exchange have been set up in system.
- GTM (Global Trade Management) Expense Management is implemented and capable of performing planned expense accrual, settlement with service provider, and recovery from counterparty. Account determination for Vendor Billing Document (VBD) is implemented to determine accrual account, deferred or regular cost of service account, and deferred or regular service revenue account.
- Material Management (MM) invoicing and SD (Sales and Distribution) billing are fully implemented and are functional with FI (Financial Accounting) AP (Accounts Payable) and AR (Accounts Receivable).
- The entire Pricing Customizing has been implemented.
- The condition types for DPQS, optionality, and expenses have been configured in the pricing procedure.
- You have configured the ABD (Agency Business Document) billing types appropriately.

Features

Settlement is an iterative process that can be carried out several times during a contract's life cycle. This depends on the type of transaction (purchase or sale) and the contract terms. Contract settlement is broadly organized into the following three types:

- Provisional Settlement
  A financial settlement of a load or unit using a provisional price or using estimated weights and grades with invoicing adjustments occurring after actual weights and grades are received. It is possible to have several provisional settlements per shipment.
  Provisional settlements are created under the following circumstances:
  - When only a provisional weight or provisional grade is available
  - When only provisional price is available for a portion of the application document line or sub-line
  - When a user can create a subsequent provisional shipment settlement with changed weight, grade, and price from previous provisional settlement (with a validation that ensures an actual condition has changed to prevent creation of a zero impact settlement)
- Final Settlement
  A financial settlement of a load or unit using an established price, and actual weights and grades
- Adjustment Settlement
  A financial settlement created for a settlement document after the final settlement document has been released for invoicing. The purpose is to capture additional financial adjustments that have happened to the preceding invoice or billing document due to additional expenses on the contract and so on.

The manual pricing lot assignment is implemented in the application document. Settlement only receives manually assigned pricing lots. The maintenance of pricing lots in settlement is not supported.

More Information

- Settlement Group [page 166]
- Agency Business Document [page 176]
- Maintenance of Settlement [page 178]
- Non-Standard Settlement [page 190]
- Invoicing Settlements [page 200]
- Revenue Recognition and Purchase Realization [page 203]

10.1 Settlement Group

Use

A settlement group is a collection of settlement units. Each application document item is mapped to one settlement unit, and multiple settlement units are grouped into a settlement group using grouping criteria. Predefined split criteria prevent the grouping of two settlement units into the same group. When both grouping criteria and split criteria are applied at the same time, split criteria always overrides grouping criteria.

For each settlement group, an agency business document (ABD) is created with the ABD items mapped to the settlement units. For example, if the settlement group is formed out of two settlement units, an ABD would be created with two line items and the details for each of the items would be copied from the corresponding settlement unit. The settlement group corresponds to the header in the ABD.

Activities

You can perform the following maintenance tasks for settlement groups:

- Specify a deferred date and term
- Specify the print order sequence on the lien table
- Deactivate the lien (this deactivates the lien from the respective settlement units)
- Release, approve, or reject the settlement group

To display a settlement group, proceed as follows:

1. On the *SAP Easy Access* screen, choose ▶ *Agricultural Contract Management* ❯ *Contract Settlement* ❯ *Display Settlement Group* ❯.
2. Choose *Display*.
3. Enter the required details and choose ⊕.
   You can view the settlement group details here. You cannot make any changes to any of the fields in this screen.
   You can also view the settlement groups while creating a settlement. For more information, see Creating Settlements [page 179].

More Information

- Settlement Unit [page 167]
- Settlement Pricing [page 170]

10.1.1 Settlement Unit

Use

All settlement related calculations happen at the settlement unit level. During creation of the settlement group, the agency business document (ABD) is created in the background as well and contains all MM invoice relevant data, such as vendor or quantity information and information about the payable amount. Several settlement units are grouped together based on a grouping criteria or split criteria to form settlement groups. Each settlement unit becomes a line item in an ABD.

Prerequisites

Validation rules have to be executed before the grouping of settlement units. The validation rules should prevent the following:

- Purchase and sales units to one settlement group
- Multiple counterparty to one settlement group
- Multiple terms of payment to one settlement group
- Multiple delivery terms to one settlement group
- Multiple currencies to one settlement group
- Multiple deferred terms to one settlement group
- Intercompany and intracompany to one settlement group
- Provisional and final settlement to one settlement group
- Multiple lien holder to one settlement group
- Multiple contract types to one settlement group

Features

The settlement workcenter provides the ability to combine several settlement units into a settlement group. This grouping of the settlement units could be automatic or proposed.

In automatic grouping, a business rule is applied to group the settlement units together. This rule identifies which fields have to be considered for grouping the settlement units and the values for these fields. This will be a selection rule (Yes/No). When the user wants to automatically group the settlement units, the settlement workcenter uses this rule.

In proposed grouping, the user provides grouping criteria to group the settlements for a set of application document items (which may or may not have been assembled in application).

The settlement unit has the following features:

- Payment Split
  This occurs only on the purchase side. This enables you to split the payment due to a vendor with their business partner. The trading contract should specify the business partners with whom the payment can be split based on a percentage or based on a fixed amount. For example, vendor X wants to split the value of its settlements across vendor A and vendor B equally, then the split value rule will be vendor A - 50%, vendor B - 50%. So whenever a settlement occurs for vendor A, the value of the settlement will be split and paid to vendor A and vendor B. If another split percentage is entered by the user in the settlement work center, the payment split value percentage maintained here will not be used. Once you have approved a document which has payment split, a payment split accounting document number is generated. You can view this at the settlement group level.
- Expenses Tab
  For each trade, planned expense can accrue and actual expenses occur. Those expenses and in many instances need to be settled together with the primary trade to provide consolidated invoice and billing capability to vendor and customer. For more information see, Expense Management [page 81].
- Lien Holders Tab
  These are defined for vendors sharing titles of goods in the trading contracts. When there are lien holders defined for a vendor, payment to vendor is always done by check and bears the names of both vendor and

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lien holder. When a settlement unit or settlement group is generated, the liens are retrieved for the vendor, commodity, state, and country, and dates (with the current settlement date). If the vendor of the settlement is in a partnership, all the liens associated with the partnership and the other vendors in the partnership will be retrieved. In the settlement unit, you can deactivate a lien for the particular settlement unit by deselecting the *Active* checkbox.

On the *SAP Easy Access* screen, choose ▶ *SAP Agricultural Contract Management* ▶ *Contract Settlement* ▶ *Maintain Lien Settings* ❭ to maintain all lien related data. In this master data transaction, you can add, change, and display the lien. A new lien ID is generated for each lien added to the vendor. You can add several liens for the same vendor.

To update lien data for a settlement unit or settlement group, go to *SAP Easy Access* screen and choose ▶ *SAP Agricultural Contract Management* ▶ *Contract Settlement* ▶ *Settlement Workcenter* ❭. You can then choose *Settlement Lien Update*.

- Conditions (Purchase) Tab
  The value for pricing is determined from the CPE conditions maintained in contract. The pricing determines the gross price of the settlement document. The pricing is also important to determine the category of the settlement provisional or final. For more information see, Commodity Pricing Engine [page 63]

- DPQS Tab
  It is specified in contract, with possibility to overwrite certain quality factor at contract level. You can also specify the weight and quality certificates to govern in the contract. You can also specify the governing weight and quality certificates for different types of settlement for invoicing. You can also negotiate the DPQS values in settlement. for more information, see Discount Premium Quality Schedule [page 22]

- Optionality Tab
  This is derived from the contract. Optionality related to the particular load and its relevant discounts and premiums are retrieved in settlement. They also affect the net value on the settlement unit. For more information, see Contract Optionalities [page 48]

- Deferred payment
  This is only valid for a purchase scenario. Deferred payments occurs is when the payment to a vendor is delayed up to a particular date. Deferred payment lets the customer pay a lump sum on a decided date to the vendor for several transactions rather than paying as soon as each transaction takes place. When a transaction takes place, the payment is put on-hold in a separate deferred account. On the deferred payment date, the amount from this account gets release to the vendors account. For a deferred payment scenario, the invoice is always put on a *Settlement Hold Invoice* status. On the deferred payment date, you must change the status from *Settlement Hold Invoice* to *Release Invoice* in the *Settlement Approval Queue*. You can maintain the deferred payment details either at contract application or at contract settlement level. Following are features of deferred payments:
  - Deferred payment and pre-payment do not occur at the same time.
  - Payment cannot be deferred on the contract once settlement is released.
  - If the payment is deferred on the contract once the settlement is complete, you need to defer the settlement.
  - Payment is deferred for the entire amount on the settlement group.
  - Information in settlement, which is taken from the contract (service fee, pre-payment, deferred payment), should not change on the contract after the settlement is released. Settlement will not consider any changes.

More Information

10.1.1.1 Settlement Pricing

Use

Contract settlement needs to determine a base price before applying any adjustments to that price. You specify the prices at a contract line item or contract line item quantity level, which is also known as pricing lots. In some cases, the price that may be established is known as a provisional price. That is, it is not a final or fixed price, but can be used to calculate payments for a load or unit before final price is established and before final settlement of the contract takes place.

Contract settlement is designed to evaluate and consume pricing lots that are associated to a contract line item at either the item or sub item level. It also contains a pricing aspect and validity period. Settlement also tracks which pricing lots have been consumed for settlement purposes to ensure that prices that are specific to a quantity, contract line, and delivery period are referenced during settlement.

One of the key processing features of settlement is the ability to adjust prices based on a set of quality and quantity criteria that are associated with a specific trading contract. A GTM contract includes a set of schedules and other premiums and discounts that should be applied during settlement process of a shipment or a contract.

There are two ways in which price can be allocated to a settlement document. During provisional settlement, available pricing is distributed according to pricing distribution rules. Provisional pricing is retrieved for quantities for which pricing is not established. This does not change any existing pricing lot distributions.

During final settlement, pricing lots are distributed to the load being finally settled, based on pricing distribution rules. For final shipment settlement process, pricing lots that were already distributed to other loads can be undistributed and then distributed to the application document line or sub-line being settled. During final shipment settlement, the pricing lots assigned to the application line or sub-line are locked for provisional settlement. The pricing lots assigned are not locked.

Features

- Price Override Tab
  You can view this at the settlement unit level. This facility allows the overriding of prices at the item level in the provisional settlement. The manual price override feature shows the pricing details and allows the user to enter the override price. After the override price is copied into the settlement document, the settlement values are recalculated. You can perform the price override for each lot individually, or you can copy the default price at header level to all lots by choosing the *Copy* pushbutton. You can also maintain the reason code and the reason text here.
- Contract Price Determination
  The system determines the contract price from four pricing types namely, basis, futures, full price, and provisional price. The weighted average of the four pricing types gives the contract price.

- DPQS Tab
  You can view this at the settlement unit level. The discount or premium on a settlement amount due to the deviation in the quality of the goods received or goods issued.
- Expenses Tab
  You can view this at the settlement unit level. You can change the values in this tab page. Expenses also affect the net value in settlement.
- Optionalities Tab
  You can view this at the settlement unit level. This is derived from the trading contract. The optionality related to the particular load along with its relevant discounts and premiums are retrieved during settlement. The optionality also affects the net value on the settlement unit.

More Information

- Commodity Pricing Engine [page 63]
- Pre-Payments [page 173]

10.1.1.1.1 Foreign Exchange Rates in Settlement

Use

If foreign currencies are involved in your trading scenario, the settlement process uses the foreign exchange (FX) rates provided by the Commodity Pricing Engine (CPE) to calculate the gross amount. The settlement process uses internal FX rates from the TCURR table to calculate DPQS, optionality, and expense amounts.

When a settlement is being determined as provisional or final, the FX rate status is taken into account. If the FX rate is not fixed, the settlement cannot be made final and revenue recognition or purchase realization cannot take place.

More Information

Commodity Pricing Engine [page 63]

10.1.1.1.1.1 Overview of Foreign Exchange in Settlements

Use

Foreign Exchange (FX) functionality has been developed to provide flexibility when completing Settlements in international transactions, where the Source and Target Currencies are different.

Features

During the Settlement, if the Source and Target Currencies are different, a user should be able to provide a negotiated FX rate using this functionality. FX can be applied for any Settlements that fall in the categories mentioned below :

- Non-Standard Settlement
  - Washout Scenario. For more information, see FX Functionality in Washout Settlement [page 193]
  - Circle Scenario. For more information, see FX Functionality in Circle Settlement [page 199]
  - Cancellation Scenario. For more information, see FX Functionality in Cancellation Settlement [page 196]
- Standard Settlement
  - Sales Scenario
  - Purchase Scenario
  - Intercompany Scenario
- Returns Settlement
  - Full Returns Scenario. For more information, see FX Functionality in Full Returns Settlement [page 189]
  - Partial Returns Scenario. For more information, see FX Functionality in Partial Returns Settlement [page 189]
- Reversal Settlement. For more information, see FX Functionality in Reversal Settlements [page 187]
- Storage Settlement. For more information, see FX Functionality in Storage Settlement [page 214]

Scenarios handled by the FX functionality

In the Settlement screen, the scenarios that are handled by FX are :

- **Settlement Creation :** After proposing the Groups in Create Settlement screen, FX will be displayed in the:
  - Settlement Group: Group FX Negotiation tab will appear at the Settlement Group header and will show the
    - *Amount type*
    - *Source Currency*
    - *Target Currency*
    - *Origin FX*
    - *Negotiated FX*
  - Settlement Unit
    - *Amount type*
    - *Source Currency*
    - *Target Currency*
    - *Origin FX*
    - *Negotiated FX*

The prices on the Settlement Creation screen will change if the negotiated FX Rate is changed manually. This change is called Re-pricing and occurs whether the manual update is done at the Settlement Group or Settlement Unit level.

After the Re-pricing is done and the new FX rate is provided, the FX rates are transferred from the Settlement Group FX tab to the Settlement Unit FX tab. The Settlement amounts at Unit level are then recalculated based on the Negotiated FX rate. This rate will change the Total Settlement amount, Net amount, and the gross Amount if gross amount is also Re-priced.

At the Unit FX tab, if the Negotiated FX rates are given directly and Re-pricing is done, only the FX tab at Unit level is changed. There is no change at the Group FX tab. However, the Settlement amounts will change if data changes in either the Group or Unit FX tabs or both.

- At the Change workcenter, all the FX data that is changed at the time of creation will be moved to Settlement Group/Unit level. However, the process of changing the FX data at Group/Unit Level is same as discussed in the Creation of Settlement. For more information, see Creating Settlements [page 179]. After releasing the Settlement FX tabs in both, the Group/Unit become disabled. Hence, at Settlement Approval also, no FX data can be changed.
- Target Currency flows from the various above mentioned scenarios until it reached the Settlement screen.

Origin FX calculation

For Settlement amount calculation, the Base amounts for various amount types are multiplied with their corresponding Origin FX values. Origin FX value is basically the exchange rate from the TCURR table based on From Currency and To Currency. Default rate type "M"is considered for computation.

10.1.1.1.2 Pre-Payments

Use

You can choose to make a down payment on a contract. This initial payment is called pre-payment and a provisional settlement is done. The pre-payment amount is retrieved at the time of settlement. This does not affect the net amount on the settlement unit. However, when the invoice is created, the system checks if a pre-payment exists and clears the pre-payment posted earlier.

Features

- You can make a pre-payment on a contract, for both sales and purchase orders. (see Creating Pre-Payment Requests [page 57])
  - In the case of a purchase order, a pre-payment is made. During invoicing, the down payment is cleared.
  - In the case of a sales order, a pre-payment is requested. At the time of billing, clearing document is posted for corresponding pre-payments.
- A tab page is provided at the group level to display all the pre-payments existing for a contract or for an order of the settlement units in the group. For more information, see Settlement Unit [page 167] and Settlement Group [page 166].
- A field is provided on the settlement unit to capture the consumption amount with the pre-payment amount defaulted by the system. You can also overwrite the consumption amount.

Example

For a sales order value of $10,000 you can choose to make a pre-payment of $4,000. For the pre-payment, you can manually adjust the consumption amount as $2,000 indicating that you want to consume only $2,000 of

the pre-payment amount. At the time of invoice creation, the final amount is $10,000 though a manual clearing of only $2,000 is required for settling the payment.

More Information

- Retrieving Pre-Payments [page 174]
- Clearing Pre-Payments [page 175]

10.1.1.1.2.1 Retrieving Pre-Payments

Prerequisites

You have performed the following:

- Maintained the pre-payment terms and the consumption amount at the time of contract creation.
- Posted the pre-payment as follows:
    - To *Post Customer Down Payment*, use transaction `F-29`.
    - To *Post Vendor Down Payment*, use transaction `F-48`.

Context

To make the final settlement on the contract, you retrieve the pre-payment amount that was initially made.

Procedure

1. On the *SAP Easy Access* screen, choose ▶ *Agricultural Contract Management* ❯ *Contract Settlement* ❯ *Settlement Workcenter* ❯ *Create Settlement* ❯.
2. Enter the application document number.
3. Choose ⏱.
4. Select the row for the relevant application document and then choose *Propose Groups*.

    The pre-payment data and the available amount to be consumed for the entered reference document are displayed.
5. The system defaults the consumption amount to the available amount.

    Note that you can also manually overwrite this amount.

6. Save your changes.

10.1.1.1.2.2 Clearing Pre-Payments

Prerequisites

You have performed the following:

- Maintained the pre-payment terms and the consumption amount at the time of contract creation.
- Posted the pre-payment as follows:
  - To *Post Customer Down Payment*, use transaction `F-29`.
  - To *Post Vendor Down Payment*, use transaction `F-48`.
- At the time of settlement creation, the posted pre-payments are retrieved in the Settlement Workcenter.

Context

You use this procedure to clear the retrieved pre-payment data.

Procedure

1. On the *SAP Easy Access* screen, choose ▶ *Agricultural Contract Management* ❯ *Contract Settlement* ❯ *Settlement Workcenter* ❯ *Change Settlement* ▶.

2. Enter the required group data and choose 🕐.

3. From *Settlement Workcenter*, release the settlement document.

   The settlements are displayed in the approval queue.

4. On the *SAP Easy Access* screen, choose ▶ *Agricultural Contract Management* ❯ *Contract Settlement* ❯ *Settlement Approval Queue* ▶.

   You can check the status of the pre-payment in *Manage Pre-Payment Requests* report.

10.2 Agency Business Document

Use

The agency business document (ABD) is a superior term for sales and purchase activities and can be divided into two sub document types:

- Expense settlement document for sales scenario
- Vendor Billing Document (VBD) for purchase scenario

Both document types provide the same functionality to the user but they use different kinds of master data sets. The expense settlement document uses customer master data and settings, while the VBD uses vendor master data records and settings. The third party purchase and third party sales scenario is adjusted by the ABD, which is embedded in the settlement process and placed in the process flow between the settlement group or settlement unit and the MM invoice.

During creation of the settlement unit, the ABD is created in the background and it contains all MM (Material Management) invoice relevant data, such as vendor or quantity information and information about the payable amount. The invoice retrieves its information from the ABD, instead of the settlement group or settlement unit. ABD also provides the functionality of full pricing, uploading attachments, output determination and so on.

Features

For third party sales, the ABD behaves in the following way:

- It is statistical and does not do any postings to FI (Financial Accounting).
- The billing due list displays deliveries that are associated with the approved ABD.
- Financial postings are made out of the SD billing document.

For third party purchase, the ABD behaves in the following way:

- It is statistical and does not do any postings to FI.
- Information from settlement flows to standard MM Invoice.
- Financial postings are made from the MM Invoice.
- Each item on the ABD creates an item on the invoice.

More Information

10.2.1 Displaying and Maintaining Agency Business Documents

Use

You can display and maintain an agency business document (ABD) using this process.

Process

For third party sales and purchase scenario, proceed as follows:

1. On the *SAP Easy Access* screen, choose ▌▶ *Agricultural Contract Management* ❯ *Contract Settlement* ❯ *Settlement Workcenter* ❯.
2. In *Create Settlement*, choose one application document.
3. Create a temporary settlement group and temporary settlement unit. No ABD is created.
4. Choose ⊕. This generates the settlement group, which triggers the following:
   - Creation of settlement group and settlement unit (status created, instead of temporary)
   - Creation of ABD after the creation of the settlement unit
5. Save the settlement unit or the settlement group.
   This updates the ABD in the background.
6. In *Change Settlement* choose ✎, and then choose *Release*.
   The *Enter a Long Text* screen appears.
7. Enter a reason code to release the settlement group.
   The settlement unit moves into the settlement approval queue, while the ABD remains unchanged.
8. In the *Settlement Approval Queue*, approve the settlement group or settlement unit and release the ABD for accounting. The status for the appropriate ABD will change to *Approved* as well.

Result

The information from settlement flows into the following documents:

- In sales, billing due list displays deliveries that are associated with the approved ABD.
- In purchase, ABD information flows into MM (Material Management) invoice. The system makes financial postings from the SD (Sales and Distribution) billing document or the MM invoice.

10.3 Maintenance of Settlement

Use

There are several stages in the contract settlement process, such as creating, changing, releasing, approving, canceling, reversing, and returning. For each settlement group, an ABD is created. The pricing of this ABD is carried out by settlement. Once the settlement is approved, a billing (SD) or invoice (MM) document is created. For sales side settlement, a billing document is created manually. For purchase side settlement, an MM invoice is created automatically. Depending on whether the application is provisional or final, and whether the contract has full price (both basis and futures), the settlement becomes either provisional or final.

Features

During settlement, a settlement document is created. A settlement document is a collection of settlement groups. The settlement document contains details regarding pricing, discounts, premiums, fees, and so on. The ABD or billing simulation ABD is created from a settlement document. Next, either an MM invoice is created for a purchase scenario, or an SD billing document is created for a sales scenario. A revenue recognition ABD is subsequently created, after which revenue is recognized.

Activities

This section explains the following activities:

- Settlement Workcenter [page 178]
  - Creating Settlements [page 179]
  - Cancelling Settlements [page 182]
  - Releasing Settlements [page 183]
  - Approving or Rejecting Settlements [page 184]
  - Adjusting Settlements [page 185]
  - Reversing Settlements [page 186]
  - Returning settlements [page 188]

10.3.1 Settlement Workcenter

Use

The settlement workcenter provides several settlement related functions.

Features

The settlement workcenter contains a selection screen. It contains several functionalities related to settlement like create, change, adjust, reverse, returns, and so on.

A provisional settlement is created if there are no final prices and a final application document. For a provisional settlement, the final step is invoice creation. You cannot recognize revenue of a provisional settlement.

Final settlement is the last settlement for a trading contract after contract is fulfilled, that is, all settlements are done on the contract. This settlement is performed when the contract is fulfilled, price is fully established, and all expenses and services are recorded. Balances from previous settlement document, if any, are computed for that contract. The payment type applicable is final payment or invoice. The final step is revenue recognition or purchase realization.

You can view Commodity Pricing Engine information in the settlement workcenter. This information is display only.

Activities

You can perform the following activities in the settlement workcenter:

- Creating Settlements [page 179]
- Cancelling Settlements [page 182]
- Releasing Settlements [page 183]
- Approving or Rejecting Settlements [page 184]
- Adjusting Settlements [page 185]
- Reversing Settlements [page 186]
- Returning Settlements [page 188]

10.3.1.1 Creating Settlements

Prerequisites

A contract application exists.

> **i Note**
>
> If the Source and Target Currencies for the Settlement are different, then the FX functionality needs to be used for negotiation.
>
> - For Sales settlement, see FX functionality in Sales Settlement [page 181]
> - For Purchase settlement, see FX Functionality in Purchase Settlement [page 180]
> - For Intercompany settlement, see FX functionality in Intercompany Settlement [page 182]

Procedure

1. On the *SAP Easy Access* screen, choose ▌▶ *Agricultural Contract Management* ❯ *Contract Settlement* ❯ *Settlement Workcenter* ▐ .

2. Choose *Create Settlement*.

3. Enter the required details and choose ⏱.

4. Choose the required document and then choose 📝.

5. Choose *Proposed Groups*.

   Settlement units and settlement groups are simulated. You can review the simulated settlement group and unit by choosing (icon) 🔳.

6. In the *Settlement Group* group box, choose 🔴 to generate the document.

Results

You have created a settlement document.

10.3.1.1.1 FX in Purchase Settlement

Use

This process is used to implement the FX functionality in Purchase Settlement.

Prerequisites

To implement the FX functionality in Purchase Settlement, the source and target currencies need to be different and the settlement has to be an international settlement.

Features

The following can be observed In the Purchases Settlement scenario:

- The Purchase Order Currency will flow as *Target Currency* in the Settlement *Group FX* and Settlement Unit *FX* tabs.
- The rest of the process for negotiation remains the same as discussed in the Overview. For more information, see FX Overview [page 171]

Process

To implement the Purchase Settlement scenario, proceed as follows:

- Pricing currency in the contract will be the source currency.
- The settlement currency would be derived from the Order (be it Sales/Purchase/STO) Currency.
- If both are different, one can do the negotiation. The rest of the process is the same as discussed in the Overview. For more information, see FX Overview [page 171]

10.3.1.1.2 FX in Sales Settlement

Use

This process is used to implement the FX functionality in Sales Settlement.

Prerequisites

To implement the FX functionality in Sales Settlement, the source and target currencies need to be different and the settlement has to be an international settlement.

Features

The following can be observed In the Sales Settlement scenario:

- The Sales order currency shall flow as *Target Currency* in Settlement *Group FX* and Settlement Unit *FX* tabs.
- The remaining process for negotiation shall be same as discussed in the Overview. For more information, see FX Overview [page 171]

Process

To implement the Sales Settlement scenario, proceed as follows:

- Pricing currency in contract will be the source currency.
- Settlement currency would be derived from the Order (be it Sales/Purchase/STO) currency.
- If both are different, one can negotiate. The rest of the process remains the same as discussed in the Overview. For more information, see FX Overview [page 171]

10.3.1.1.3 FX in Intercompany Settlement

Use

This process is used to implement the FX functionality in the Intercompany Settlement.

Prerequisites

To implement the FX functionality in Intercompany Settlement, the source and target currencies need to be different and the settlement has to be an international settlement.

Features

The following can be observed In the Intercompany Settlement scenario:

- STO Currency shall flow as *Target Currency* in Settlement *Group FX* and Settlement Unit *FX* tabs.
- The remaining process for negotiation shall be same as discussed in the Overview. For more information, see FX Overview [page 171]

Process

To implement the Intercompany Settlement scenario, proceed as follows:

- Pricing Currency in Contract shall be the Source Currency.
- Settlement Currency would be derived from the Order (be it Sales/Purchase/STO) Currency.
- If both are different, one can do the negotiation. The rest of the process for negotiation remains the same as discussed in the Overview. For more information, see FX Overview [page 171]

10.3.1.2 Cancelling Settlements

Use

You use this procedure to cancel a settlement document, settlement unit, or settlement group.

Procedure

1. On the *SAP Easy Access* screen, choose ▐▶ *Agricultural Contract Management* ❯ *Contract Settlement* ❯ *Settlement Workcenter* ▐ .
2. Choose *Change Settlement*.

3. Enter the required details and choose ⏰.
4. In the *Settlement Group* group box, choose the settlement group line item to display the relevant settlement units.
5. In the *Settlement Unit* group box, choose the settlement unit line item.
6. Choose 🖈 and then choose *Cancel*.
   The selected settlement unit is canceled.

> **i Note**
>
> - You can settle the same contract application by following the settlement process from creating a settlement onwards. For more information, see Creating Settlements [page 179].
> - If a particular settlement group has only one settlement unit, the settlement group also gets canceled along with the canceled unit.

10.3.1.3 Releasing Settlements

Use

You use this procedure to release a settlement for approval or rejection.

Prerequisites

A settlement document has been created.

Procedure

1. On the *SAP Easy Access* screen, choose ▶ *Agricultural Contract Management* ❯ *Contract Settlement* ❯ *Settlement Workcenter* ❯.
2. Choose *Change Settlement*.
3. Enter the required details and choose ⏰.
4. In the *Settlement Group* group box, choose the settlement group line item.
5. Choose 🖈 and then choose *Release*.
   The *Enter Long Text* screen appears.
6. Enter the correct reason code.
7. Choose ✔.

> **i Note**
>
> You must make all required changes to the settlement document before you release the document. After you release a document you must then approve or reject the settlement

Result

You have released the document.

More Information

10.3.1.4 Approving or Rejecting Settlements

Use

You use this procedure to approve or reject a settlement document.

Prerequisites

You have released the settlement document.

Procedure

To approve a settlement document, proceed as follows:

1. On the *SAP Easy Access* screen, choose ▶ *Agricultural Contract Management* ❯ *Contract Settlement* ❯ *Settlement Approval Queue* ❯.
2. Choose *Settlement Approval Queue*.
3. Enter the required details and choose ⏱.
4. In the *Settlement Group* group box, choose the settlement group line item.
5. Choose 🗸, then choose either *Approve* or *Release Invoice*.

> **i Note**
>
> - For a sales scenario, if you choose *Approve*, the settlement document gets approved and you create a billing document manually in the transaction **VF01**.
> - For a purchase scenario, if you choose *Approve*, the settlement document gets approved and an MM invoice document is created automatically.
> - For a non-self-billed scenario, if you choose *Approve*, the document goes into the *Settlement Hold Invoice* status. In such a case, you choose *Release Invoice* to release the document for invoice creation.

To reject a settlement document, proceed as follows:

1. On the *SAP Easy Access* screen, choose ▶ *Agricultural Contract Management* ❯ *Contract Settlement* ❯ *Settlement Approval Queue* ❳.
2. Choose *Settlement Approval Queue*.
3. Enter the required details and choose 🕒.
4. In the *Settlement Group* group box, choose the settlement group line item.
5. Choose 🔧, then choose *Reject*.
   The *Enter Long Text* screen appears.
6. Enter a reason code and choose ✔.

> **i Note**
>
> For a sales and purchase scenario, if you choose *Reject*, the settlement document can be edited. You can then make the necessary changes and release the document. For more information, see Releasing Settlements [page 183].

Result

You have either approved or rejected the settlement document.

More Information

Invoicing Settlements [page 200]

10.3.1.5 Adjusting Settlements

Use

Settlement adjustment lets you create settlement adjustment documents. This is used to make a financial adjustment to the settlement units. Settlement adjustment does not update the application document or free up any pricing lots. It only updates settlement reversal. Settlement adjustment is only possible after an approved final settlement that has been invoiced.

Procedure

1. On the *SAP Easy Access* screen, choose ▶ *Agricultural Contract Management* ❯ *Contract Settlement* ❯ *Settlement Workcenter* ❳.

2. Choose *Settlement Adjustment*.

3. Enter the required details and choose ⊕.
   You can view the simulated adjustment settlement document here.

4. Choose ⬡.
   This generates a new settlement group ID for the adjusted document.

> **i Note**
>
> You can then create a settlement and continue the settlement procedure. For more information, see
> Creating Settlements [page 179].

10.3.1.6 Reversing Settlements

Use

You use this procedure to reverse a settlement. A settlement reversal always creates a credit memo request on sales or a credit memo on purchase side and will mark the linked application document as settlement reversed. The sales credit memo request is created with reference to the original invoice and the purchase credit memo with reference to the purchase order. There can be a partial or full settlement reversal. A partial settlement reversal is executed when only a part of the settlement group is reversed, which means only a few settlement units out of a group. A full reversal is the process where a credit for the entire amount of the settlement group is created. The user cannot change any financial values.

Prerequisites

> **i Note**
>
> If the Source and Target Currencies for the Settlement are different, then the FX functionality needs to be used for negotiation. Fore more information, see FX Functionality in Reversal Settlements [page 187]

Procedure

1. On the *SAP Easy Access* screen, choose ▶ *Agricultural Contract Management* ❯ *Contract Settlement* ❯ *Settlement Workcenter* ❯.

2. Choose *Settlement Reversal*.

3. Enter the required details and choose ⊕.

4. In the *Settlement Units* group box, choose the document.

5. Choose ⬀.
   In the *Reversal Settlement Groups* group box, a new line item containing the simulated settlement groups appear.

6. In the *Settlement Group* group box, choose the document.

7. Choose ⊕.
   The selected groups are generated and a new settlement group ID and settlement unit ID is created. This new settlement document will have the document category as *R*. You can view this category by choosing the *Details* pushbutton inthe *Settlement Group* group box.

> **i Note**
>
> Once you reverse a settlement document, you can make adjustments to the values in the document. After you have made the changes, you can release the settlement document and continue with the settlement procedure.

More Information

Releasing Settlements [page 183]

10.3.1.6.1 FX in Reversal Settlements

Use

This process is used to implement the FX functionality in Reversal Settlement.

Prerequisites

To implement the FX functionality in Reversal Settlement, the following prerequisites need to be considered:

- The prerequisites for this process are the same as those required to execute a Reversalt scenario for Contract Settlement. For more information, see Reversing Settlements [page 186]
- The source and target currencies are different and the settlement is an international settlement.

Features

All the settlement amounts from Forward Settlement document are copied to Reversal document, including all the FX related details from the *Group FX* and Unit *FX* tabs.

Process

There is no negotiation involved in Reversal. Only the data from Forward document is copied to Reversal document. These details can only be viewed and not updated as no negotiations are involved.

10.3.1.7 Returning Settlements

Use

You can only return a final settlement document whose revenue has been recognized. This is invalid for a provisional settlement scenario. Settlement return allows the selection of return application documents for settlement creation. The settlement returns document once created goes through the same lifecycle as a normal settlement document.

Prerequisites

You have created a Return Application document.

> **i Note**
>
> If the Source and Target Currencies for the Settlement are different, then the FX functionality needs to be used for negotiation. For more information, see FX Functionality in Full Returns Settlement [page 189] for Full Returns and see FX Functionality in Partial Returns Settlement [page 189] for Partial Returns.

Procedure

1. On the *SAP Easy Access* screen, choose ⏵ *Agricultural Contract Management* ⟩ *Contract Settlement* ⟩ *Settlement Workcenter* ⟩.
2. Choose *Settlement Returns*.
3. Enter the required details and choose 🕒.
4. In the *Application* group box, choose the document.
5. Choose 📝.
   In the *Settlement Group* group box, a simulated returns settlement group is created.
6. Choose 🛡.
   A returns settlement document is created.

> **i Note**
>
> - You can then create a settlement document and continue the settlement process. For more information, see Creating Settlements [page 179].
> - Once you have created the invoice for the returns settlement document you must recognize revenue.

Result

You have returned a settlement document.

10.3.1.7.1 FX in Full Returns Settlement

Use

This process is used to implement the FX functionality in Full Returns Settlement.

Prerequisites

The prerequisites for this process are the same as those required to execute a Full Returns scenario for either sales or purchase. For more information, see Returning Settlements [page 188]

Features

All the settlement amounts from Forward settlement document are copied to Full Return, including all the FX related details from the *Group FX* and Unit *FX* tabs.

Process

There is no negotiation involved in Full returns. All the data from the Forward document, including the FX details, is copied to the Return document. These details can only be viewed and not updated as no negotiations are involved.

10.3.1.7.2 FX in Partial Returns Settlement

Use

This process is used to implement the FX functionality in Partial Returns Settlement.

Prerequisites

To implement the FX functionality in Partial Returns Settlement, the following prerequisites need to be considered:

- The prerequisites for this process are the same as those required to execute a Partial Returns scenario for either sales or purchase. For more information, see Returning Settlements [page 188]
- The source and target currencies are different and the settlement is an international settlement.

Features

The following can be observed In the Partial Returns Settlement scenario:

- All the settlement amounts from Forward settlement document are copied to Full Return including all the FX related details from the *Group FX* and Unit *FX* tabs.
- Settlement amounts are computed by a partial factor and then shown in the Return document.

Process

There is no negotiation involved in Partial returns. Only the data from Forward document is copied to Return document and a computation of Settlement amounts is done, keeping the partial factor in mind. These details can only be viewed and not updated as no negotiations are involved.

10.4 Non-Standard Settlement

Use

The firm may enter into a purchase or sales agreement with a counterparty and then later determine that the commodities should not be moved. In such cases, non-standard settlement is done and the two counterparties settle the trading contracts involved. This occurs in scenarios, such as a washout, an underfill, a cancellation, or a circle.

In the settlement document, the relevant scenario is indicated by the settlement type. This document is generated for the scenarios followed by settlement realization. The non-standard settlement (washout/ underfill) document is available from pricing trading contract TC header document flow.

Prerequisites

Authorization Checks

- You have maintained the checks for washout, underfill, cancellation, and circle.
- The security profiles defined for standard settlement are used. The profiles include for settlement execution, settlement approval, and settlement document display.

Features

- Washout (see Washout Settlement [page 191])
- Underfill (see Underfill Settlement [page 194])
- Cancellation (see Cancellation Settlement [page 195])
- Circle (see Circle Settlement [page 197])

10.4.1 Washout Settlement

Use

Two trading parties who have the same contract terms (such as commodity and quantity) can agree to mutually settle the contract with no movement of goods. This provides a report where you can manually select the purchase or sales contract for a business partner, specify the quantity on each contract, and mark those contracts with the relevant quantity for washout. Contracts with pre-payment cannot be washed out.

Prerequisites

- Both the sides have the same terms such as commodity, quantity, quality, time of shipment, delivery point, and so on.
- The cancellation validations have been performed.

Features

- **Modes of Washout**
  - **Test mode**
    Provides a what-if analysis to identify the washable contracts during or before negotiation of washout with the counterparty. You should perform validations to determine if the selected contracts can be washed out.
  - **Creation mode**
    Generates the washout ID and performs the same validations as in the test mode to determine the contracts that can be washed out. It also generates the washout TC and settlement.
- **Washout Equity**
  If the firm owes equity due to the counterparty, the amount due is settled through material management (MM) and if the counterparty owes equity due to firm, it is settled using the sales document (SD).

More Information

10.4.1.1 Creation of Washout

Use

You use this process to washout a quantity on the lot.

Prerequisites

You have performed the following validations:

- One purchasing contract and one sales contract should exist having open quantities to be delivered in the selected period.
- Defined the commodities of all matching trading contracts (TCs) in material selection range or material schedule. Further, validate the material schedules to determine the material intersection. Select only the contracts having materials in the intersection for washout.
- The *Exact Match* checkbox indicates whether the delivery periods should be Exact Match or Loose Match. In both cases, all sales and purchasing trading contracts with delivery periods overlapping with the entered delivery range are first selected.
  - **Exact Match**
    Further, evaluate to select only TCs on one side (sales or purchasing) and fully covering TCs on other side. Match all the primary trading materials of those on sales and purchasing contracts to trigger washout.
  - **Loose Match**
    Remove the loosely matched TCs or adjust their delivery periods to match, in order to trigger the washout process. The primary trading materials are different; however, the material intersection exists based on material schedule evaluation.
- Evaluated the pricing status at the pricing lot level against the status on the screen. Open quantities of the same pricing types are displayed and they can be selected from the TC for washout.
- **Pre-Cancellation Check**
  Ensured that the lot to be washed out is not manually locked and that there is no outstanding pre-payment.

> **i Note**
>
> If the Source and Target Currencies for the Settlement are different, then the FX functionality needs to be used for negotiation. For more information, see FX Functionality in Washout Settlement [page 193]

Process

1. The system generates the washout ID. The ID is prefixed by the letter W to indicate that it is a washout type.
2. A new standard washout trading contract is created in the background.
3. The equity due is calculated based on the washout quantity between sales and purchase trading contracts and their price difference. The result is either a "due from" or "due to" amount.
   Equity due = (sales price * washout quantity) − (purchase price * washout quantity)
   If the equity due is positive, settlement is a sales side. If the equity due is negative, the settlement is a purchase side.
4. The washout settlement document is created. The document has details of the payment term and equity due. This document is to be approved and posted to FI to correct the FI accounts.
5. To settle the equity due, the payment type ABD (Agency Business Document) is created.

10.4.1.1.1 FX in Washout Settlement

Use

This process is used to implement the FX functionality in the Washout Settlement.

Prerequisites

To implement the FX functionality in Washout Settlement, the following prerequisites need to be considered:

- The prerequisites for this process are the same as those required to execute a Washout scenario for Contract Settlement. For more information, see Creation of Washout [page 191].
- The Source and Target Currencies are different and the settlement is an international settlement.

Features

Target currency, *Rate Type*, and *Effective date* have been added to the sub-screen settlement document on the Washout screen. This is to enable the FX handling feature in the Washout related settlement so that the FX negotiation can be done in the Washout Settlement.

Process

To implement the Washout Settlement scenario, proceed as follows:

- At the initial Washout screen, the *Target Currency* is input enabled and the *Rate type* and *Effective date* are disabled.
- When the Group ID is selected on the Washout screen, the *Target Currency* field is defaulted to Contract Currency. *Rate type* and *Effective date* remain disabled.
- When the Target Currency is changed to a currency other than the Contract Currency, the *Rate type* and *Effective date* will be enabled and defaulted to "M" and Current Date respectively.
- If the Target Currency is changed to the Contract Currency again, the *Rate type* and *Effective date* will become disabled and be filled with blank values.
- While creating the Washout, the Settlement Group/Unit will be generated and the *Target Currency*, *Rate type*, and *Effective date* will be mapped in the Settlement.
- Settlement Group FX/Settlement Unit FX tabs will be shown with the Target Currency so that the user can provide the negotiated FX for the Washout Settlement.

> **i** Note
>
> Source currency will always be the Contract Currency and Target Currency is the currency which is given in the Washout screen in the *Target Currency* field.

10.4.2 Underfill Settlement

Use

The load delivered is less than the contract quantity. Such an underfill non-standard settlement is created using the information through a batch job. The underfill document is available only from the pricing trading contract (TC) header document flow.

Prerequisites

You have defined the tolerance values that are to be applied on the less delivered load.

Features

- The calculation of equity due and posts into unrealized gain or loss is based on the pricing defined by the governing established trade pricing rules. The application rules pricing are enabled in Business Rule Framework plus (BRFrules).
- When an underfill triggers cancellation, the pricing lot is assigned to the cancellation. You can determine this pricing by applying the price determination rules and selecting the least preferred pricing. The application rules pricing are enabled in Business Rule Framework plus (BRFrules).
- The underfill price is returned as a cancellation price for the remaining volume between delivery and contract mean.

More Information

10.4.2.1 Maintenance of Underfill

Use

You use this process for underfill non-standard settlement.

Process

1. When an underfill is triggered, the system generates an underfill ID. The cancellation database tables are updated with the underfill quantity and the pricing lot from which the underfill occurs.
2. The system executes the settlement batch job periodically to process the cancellation data from the table.
3. A non-standard underfill settlement is created and equity due is calculated based on the underfill pricing lot information and contract price.
4. When a standard settlement is created on the application for which an underfill exists, both the settlement unit and the appropriate settlement group are highlighted in yellow. Two pushbuttons that are provided for pull and remove underfill appear on the tool bar.
5. The system pulls underfill into settlement unit or removes underfill from settlement.
   Pull Underfill
   The *Pull Underfill* pushbutton is provided to pull the underfill non-standard settlement unit. If the underfill exists, it pulls the underfill equity due and the underfill ID into the standard settlement unit. The status of the non-standard settlement is changed to 'canceled' with appropriate reason code.
   Note that when the 'canceled' status is triggered, the status cannot be manually changed. All non-standard settlements with this status are not displayed in the approval queue.
   Remove Underfill
   The *Remove Underfill* pushbutton is provided to remove the underfill from the standard settlement unit and the settlement net value is updated. This again makes it available for non-standard settlement.
6. The underfill equity due is not considered for reversals or returns. Alternatively, the *Reversal With Underfill* indicator on the reversal/return settlement unit is set.
7. The cancellation of a settlement cannot occur if an active underfill is included in the standard settlement unit. You can manually remove the underfill before canceling the settlement unit.

10.4.3 Cancellation Settlement

Use

During cancellation of a commodity or a particular pricing TC, the open quantity determines the maximum amount of quantity that you can cancel. When such a cancellation is triggered, you can settle the equity due using the non-standard settlement based on the pricing lot prices and cancellation prices for the contract.

Prerequisites

> **i Note**
>
> If the Source and Target Currencies for the Settlement are different, then the FX functionality needs to be used for negotiation. For more information, see FX Functionality in Cancellation Settlement [page 196]

Process

1. On *Trading Contract Change* screen (transaction `WB22`), enter the details such as the quantity to be canceled, cancellation price, and cancellation fees on the *Cancellation*tab page.
   When you save the contract, the system triggers a cancellation in the background.
2. The commodity contract (CCAK) cancellation information is updated in the cancellation database tables for settlement run to pick up the data.
3. The system executes the settlement batch job periodically to process the cancellation data from the table.
4. Equity due is calculated based on the price difference and cancellation quantity. Any applicable fees applied for cancellation is also calculated. This is shown as follows:
   Settlement Gross Amount = (Cancellation qty * pricing lot price) −(Cancellation qty * cancellation price) + (Cancellation qty * cancellation fee) + Lump sum fee in cancellation header table
5. The settlement document of cancellation type is created with the following details:
   - Net equity due
   - Itemized calculation at pricing lot level
   - Itemized fee
6. The following documents are created on approval of circle settlements:
   - On the purchase side, an invoice document is created.
   - On the sales side, it depends on the equity due as follows:
     - If the equity due is positive, a Debit memo request is created.
     - If equity due is negative, a Credit memo request is created.
     Use transaction `VF04` to create credit or debit memo respectively.

10.4.3.1 FX in Cancellation Settlement

Use

This process is used to implement the FX functionality in the Cancellation Settlement.

Prerequisites

To implement the FX functionality in Cancellationt Settlement, the following prerequisites need to be considered:

- The contract is created with Cancellation data.
- The prerequisites for this process are the same as those required to execute a Cancellation scenario for Contract Settlement. For more information, see Cancellation Settlement [page 195]
- The source and target currencies are different and the settlement is an international settlement.

Features

The following can be observed In the Cancellation Settlement scenario:

- In the Cancellation tab, the *Contract Rate type*, *Target currency*, and *Effective date* are added.

- When the Contract is changed in the *Cancellation* tab, the *Contract Rate type*, *Target currency*, and *Effective date* shall be defaulted to "M", Contract Currency and Current Date respectively.
- All these fields are mandatory in the *Cancellation* tab.

Process

To implement the Cancellation Settlement scenario, proceed as follows:

- After saving the Cancellation data in the contract, the Cancellation header table shall be updated with *Rate type*, *Target Currency*, and *Effective date*.
- After the execution the Non-standard Settlement generation report, the *Rate type*, *Target Currency*, and *Effective date* shall be transferred from the Cancellation header table to Settlement Group/Unit.
- All other FX related handling in Settlement shall remain the same as discussed in the Overview. For more information, see FX Overview [page 171]

> **i Note**
>
> Source currency shall always be the Contract Currency and target currency is the currency which is given in the Cancellation screen in the *Target Currency* field.

10.4.4 Circle Settlement

Use

Commodity contract involving the firm and multiple counterparties, where the firm is on the ends of such a chain of transactions. The firm is both a seller and purchaser of the same commodity with different counterparties. The counterparties agree to settle the contracts financially without physical delivery of goods. Since the goods in the end remain with the same trading partner as the one selling it, equity due is settled calculating the difference between the purchasing and sales price.

Prerequisites

- In the customer master data, the vendor should not be maintained as direct vendor.
- In the vendor master data, the customer should not be maintained as the direct customer.

Features

You can circle out the quantities on the contracts based on the mutual agreement between three counterparties.

Example

The firm has a sales contract with A as customer and a purchase contract with B as vendor. A is to provide the firm with 100 LB and firm has to sell a quantity of 25 LB to B. Between A and B, there is a contract of 50 LB. A, B, and, the firm mutually agree to circle out a quantity of 25 LB.

To nullify all the price differences, a reference price is agreed upon by all the ounterparties.

Two settlements are created, one for sales and another for purchase in the circle process.

More Information

10.4.4.1 Creation of Circle Settlement

Use

You use this process to create and approve settlement of circles.

Prerequisites

You have checked that both the sales contract and purchase contract have the same pricing status, delivery dates, material, customer and vendor. The materials should match or should be within the optionality range.

> **i Note**
>
> If the Source and Target Currencies for the Settlement are different, then the FX functionality needs to be used for negotiation. For more information, see FX Functionality in Circle Settlement [page 199]

Process

1. You enter the selection criteria. The system groups the contracts into exact match and loose match. Note that circles cannot be created with contracts under loose match.
2. The system validates which contracts are relevant to create circles. Circle ID is generated.
3. Two circle settlements are created, one on the sales side and the other on the purchase side as follows:
   On the sales side
   - All the sales side commodity items are involved as items in circle.
   - Equity Due = (Sales contract price * circled quantity) −(Reference price * circled quantity)

On the purchase side
- ○ All the purchase side commodity items are involved as items in circle.
- ○ Equity Due = (Purchase contract price * circled quantity) –(Reference price * circled quantity)

4. The following documents are created on approval of circle settlements:
   - ○ On the purchase side, an invoice document is created.
   - ○ On the sales side, it depends on the equity due as follows:
     - ○ If equity due is positive, a debit memo request is created.
     - ○ If equity due is negative, a credit memo request is created.

     Use transaction `VF04` to create credit or debit memo respectively.

10.4.4.1.1 FX in Circle Settlement

Use

This process is used to implement the FX functionality in Circle Settlement.

Prerequisites

To implement the FX functionality in Circle Settlement, the following prerequisites need to be considered:

- The prerequisites for this process are the same as those required to execute a Circle scenario for Contract Settlement. For more information, please read Creation of Circle Settlement [page 198]
- The source and target currencies are different and the settlement is an international settlement.

Features

Target currency, *Rate Type*, and *Effective date* fields are added in the sub-screen settlement details on the Circle screen. This is to enable the Circle related settlement with FX handling feature so that FX negotiation can be done in the Circle Settlement.

Process

To implement the Circle Settlement scenario, proceed as follows:

1. At the initial Circle screen, the *Target currency* is input enabled and the *Rate type* and *Effective date* are disabled.
2. When the *Group ID* is selected on the Circle screen, the *Target Currency* field is defaulted to Contract Currency. *Rate type* and *Effective date* remain disabled.
   1. When the Target Currency is changed to a currency other than the Contract Currency, the *Rate type* and *Effective date* shall be enabled and defaulted to "M" and Current Date respectively.
   2. If the Target Currency is changed to Contract Currency again, the *Rate type* and *Effective date* become disabled and shall be filled with blank values.

3. While creating the Circle, the Settlement Group/Unit shall be generated and the *Target Currency*, *Rate type* and *Effective date* shall be mapped in Settlement.
4. Settlement *Group FX*/Settlement Unit *FX* tabs shall be shown with the *Target Currency* so that user can provide the negotiated FX for Circle Settlement.

> **i Note**
>
> Source currency shall always be the Contract Currency and target currency is the currency which is given in the *Target Currency* field on the Circle screen.

10.5   Invoicing Settlements

Use

A trading document that has been settled can be invoiced. Both a provisionally or finally settled document can be invoiced. Each settlement group must be made into one invoice. However, for the sales billing document, certain split criteria does not allow some deliveries to be invoiced together. Each item on the ABD becomes an item on the invoice. A purchase invoice is called MM invoice and a sales invoice is called a billing document or SD invoice. Financial postings are made out of the billing document or the MM invoice. An MM invoice is created automatically but a billing document must be created manually.

Integration

All configurations for standard MM Invoice and SD billing is maintained.

Features

- One settlement group should be billed as one invoice. It consists of the following:
    - All split criteria's on the invoice have to be a split criteria on the settlement group as well.
    - Flow of values is only from settlement group or unit to the ABD and never from ABD to settlement.
- Credit Memo
  A credit memo is issued by the seller to the buyer. The seller issues a credit memo for a lower amount than the invoice. This is issued if the goods are incomplete, damaged, or incorrect. A credit memo is also issued if the buyer has paid too much money, or has been under charged.
  In some cases, a settlement document for a particular application document is invoiced and subsequently, a new settlement document is created for the same application document. If the amount in this settlement document is negative or lesser than the previous billing document, then a credit memo is created.
  For a sales scenario, when a settlement document is approved, a credit memo request is created in the background, with reference to the previous billing document. You then create a credit memo by entering the credit memo request number in the transaction `VF01`.
  For a purchase scenario, when a settlement document is approved, a subsequent credit is created.

- Debit Memo

  A debit memo reduces the amounts payable to a vendor, for example, when you send damaged goods back to your vendor. When a company fails to pay or short-pays an invoice, a debit memo is issued for the balance and any late fees owed. Debit memos are identical to invoices.

  In some cases, a settlement document for a particular application document is invoiced and subsequently, a new settlement document is created for the same application document. If the amount in this settlement document is positive or higher than the previous billing document, then a debit memo is created.

  For sales scenario, when a settlement document is approved, a debit memo request is created in the background, with reference to the previous billing document. You then create a debit memo by entering the debit memo request number in the transaction `VF01`. All items that have to be billed and that are not part of a delivery will be created as a debit request. This has to be a special debit memo request type, which can be invoiced together with the delivery or a normal debit request.

  For purchase scenario, when a settlement document is approved, a subsequent debit is created in the background. All items that have to be billed and that are not part of a delivery will be created as a debit request. This has to be a special debit memo request type, which can be invoiced together with the delivery or a normal debit request.

  > **i Note**
  >
  > - In case an invoice or debit memo is going to be reversed a credit memo has to be created.
  > - In case a credit memo is going to be reversed a debit memo has to be created.

- A billing document is created during a sales scenario. It can be created for a provisional or full settlement. A billing document is created manually. You can create a billing document only after the settlement is approved. In case of a credit or debit memo request, the billing becomes order-related so you must select the *Order-related* checkbox on the *Maintain Billing Due List* screen in the transaction `VF04`.

- An invoice is created for a purchase scenario. It can be created for a provisional or full settlement. Once the settlement document is approved, an invoice document is created automatically.

  > **i Note**
  >
  > - In case of multiple billing documents for the same delivery, only the first invoice would be based on the original document. Subsequent invoices will be billed as a debit or credit request. For example, final settlement after provisional settlement would be billed as debit or credit request.

Activities

- You can create a billing document in transaction `VF01` or `VF04`.
- You create a debit memo by entering the debit memo request number in the transaction `VF01`.
- You create a credit memo by entering the credit memo request number in the transaction `VF01`.
- You can view the MM invoice in the transaction `MIR4`.
- You can also view the invoice at the *Settlement Approval Queue* by choosing the *Document Flow* pushbutton.

More Information

Revenue Recognition and Purchase Realization [page 203]

10.6 Provisional Settlements

Use

Provisional Settlements provide the ability to post the invoice document, with or without impacting the GR/IR and Purchase Price Variance (PPV) accounts. The system treats the Provisional Settlements as an advance to the vendor and only hits the accounts that are defined in the configuration, without posting to GR/IR or PPV. In this case, only the final settlement is posted to GR/IR and PPV. Alternatively, the system can also be configured to post to the GR/IR and PPV accounts, also in Provisional Settlements.

Integration

- All configurations for standard MM Invoice are maintained.
- All GL are configured against the Agency Business Document (ABD) condition types.

Prerequisites

- The way the Provisional Settlements are posting is controlled in the IMG step, "Activate GL Provisional Settlement Postings".
- The configuration indicates whether the Provisional Settlements areposting to either the general GL accounts or the GR/IR and PPV accounts.
- Any open Settlements that exist should be closed and completed prior to changing the configuration.
- When posting to general GL accounts, a condition type to hold the previous settlement amount has to be created and assigned to the pricing procedure of the settlement ABD.
- Existing GL/PO configuration also needs to be maintained. To do so, on the *SAP Easy Access* screen, choose ▶ *SAP Agricultural Contract Management* 〉 *Contract Settlement* 〉 *Settlement Document* 〉 *Configure GL/PO Posting Settings* ◀.
- The following steps need to be performed to maintain the NEW configuration:
  1. In IMG Customizing for *Logistics - General* under ▶ *Global Trade Management* 〉 *Agricultural Contract Management* 〉 *Contract Settlement* 〉 *General Settings* 〉 *Activate GL Provisional Settlement Postings* ◀ .
     The *Change View "View: Activate GL Provisional Settlement Postings": Overview* screen appears.
  2. Choose *New Entries*.
     The *New Entries: Details of Added Entries* screen appears.

3. Enter the company code and set ACTIVE flag.
4. Save your entries.
- **Result** You have activated GL purchase provisional settlement for the company codes.

Features

- Provisional Settlements enable payment to vendors without affecting GR/IR and Purchase Price Variance (PPV).
- The "Activate GL Provisional Settlement Postings" configuration provides the flexibility to define if the the Provisional Settlement will post to GR/IR and PPV or only general GL accounts..
- It is only applicable for the following scenarios :
  - Purchase Side
  - Standard Settlements
  - Third Party
  - Intercompany

Activities

1. The steps for creating a Settlement Group, Settlement Unit, ABD, and MM invoice are the same. For more information, see Maintenance of Settlement [page 178]
2. The MM invoice still gets generated in the background.
3. The UI display of the ABD (Condition Type and its amounts) and the way FI postings are done in the MM invoice changes.

10.7 Revenue Recognition and Purchase Realization

Use

Once a contract quantity has been executed or canceled and settled, expenses or revenue related to the quantity must be recognized in the financial accounts of the firm. SAP Agricultural Contract Management has the ability to issue invoices prior to title transfer (title and risk of loss transfer), for example, processing sales orders for goods sold and delivered with lengthy transit times. In these scenarios, revenue must be deferred and associated expenses accrued for title transfer. Once title transfer occurs, revenue is recognized, along with the cost of goods sold and the accrued expenses and service revenues.

In certain situations, invoices are issued before final price determination (including price, weight, or quality) or title transfer takes place, for example, in the case of a contract commodity delivered with lengthy transit times where governing weights or governing qualities are determined at the destination after arrival and unload. In these scenarios, revenue must be deferred and associated expenses accrued until title transfer, final price, governing weight, and governing qualities have occurred. Once all four events occur, revenue is recognized,

along with cost of goods sold and accrued expenses. Costs include primary expenses (cost of goods sold from goods issue) and any secondary expenses incurred in association with the sale and shipping of a product.

For process consistency, all revenue recognition processes will utilize ABDs in a consistent manner for all third party and intercompany sales scenarios. The settlement event registry keeps track of all events that are relevant for final settlement and revenue recognition in relation to application document items. Settlement events are set by notifications that are sent from the appropriate modules of the overall solution. The registry provides an API (application programming interface) for these notifications.

Integration

The following areas are integrated with the revenue recognition area:

- Contract Application [page 119]
- Contract Settlement [page 165]
- Expense Management [page 81]
- Agency Billing Document
- Vendor Billing Document

Features

The following are some features of revenue recognition:

- Recognize sales with contract reference
- Recognize sale without reference to contract
- Recognize secondary expenses
- Purchase realization

For more information, see the documentation for the following features:

- Revenue Recognition and Purchase Realization Monitors [page 204]
- Revenue Recognition Processor [page 208]
- Purchase Realization Processor [page 207]

10.7.1 Revenue Recognition and Purchase Realization Monitors

Use

The Revenue Recognition monitor is an SAP GUI ALV-based report that displays data and other related documents from the event registry. The monitor only displays data and does not allow users to change records (manual changes to settlement event indicators are not allowed). A selection screen allows you to enter the selection criteria to retrieve the records from the event registry. You can view all the application documents in

one place, and can easily check the status of each document so that you know what steps are pending before revenue recognition takes place. You can also view the log after an application document has been processed, and can check the document flow. With this report, you can navigate from the ALV to display transactions like the trading contract, sales order, delivery document, application document, and settlement document.

Prerequisites

You have defined the fields that need to be maintained in the trading document in the Customizing activity *Maintain Settlement Events for Revenue Recognition*.

Features

The Purchase Realization Monitor and the Sales Recognition Monitor enable the following:

- Recording, tracking, and reporting of settlement events
- Status processing, as follows:
  - Ready
    Document is ready for revenue recognition.
  - Complete
    Document was executed without any error.
  - Failed
    Document was not executed due to errors.
  - Waiting
    Document cannot be executed since some process is still pending.
  - Obsolete
    The application document itself has been cancelled.

In addition, the Sales Recognition Monitor allows you to do the following:

- Use the adjustment type as search criteria to find the a specific trading document, as follows:
  - Settlement Adjustment
    If a settlement document is adjusted after revenue recognition, this document reappears as a new entry in the settlement event registry.
  - Expense Adjustment
    If an expense document is approved or settled after revenue recognition, this appears as a new entry in the settlement event registry.
  - Settlement and Expense Adjustment
    If a settlement and expense adjustment takes place in a document, this appears as a new entry in the settlement event registry.
- Display the log
- View the document flow
  The *Document Flow* pushbutton allows the user to access current state of a document and view the document flow screen with respect to all preceding and succeeding document. From this list, users can display or navigate to the relevant documents.

- Utilize *Settlement Event* indicators, as follows:
  - Title Transfer
    After goods issue, the date of title transfer is determined and updated in the delivery document. For destination sales, the document uses the estimated date of title transfer, unless this date is replaced by a confirmed actual date of title transfer. The settlement event registry is notified with the date of title transfer in conjunction with the final settlement. If a delivery confirmation is received from a customer, then a notification to set the title transfer date can be sent to the settlement event registry.
  - Final Price
    The final settlements with final prices update the event registry on approval.
  - Governing Weight
    After the governing weight certificate is entered into the Q Repository, the governing weight certificate becomes available. The system then triggers a notification at final settlement of the settlement event registry that the governing weight is final.
  - Governing Qualities
    When the governing quality certificate becomes available, the system triggers a notification at final settlement of the settlement event registry that the governing quality is final. If there are multiple governing quality characteristics, then this settlement event indicator is set after all governing quality characteristics have been received.

Activities

1. On the *SAP Easy Access* screen, choose ▶ *Agricultural Contract Management* ❭ *Contract Settlement* ❭ *Revenue Recognition* ❭ *Revenue Recognition Monitor* ❭.
2. Choose either *Purchase Realization Monitor* or *Sales Recognition Monitor* (depending on whether it is a purchase or sales scenario).
3. Enter the company code and other required fields to display the relevant trading document. You can view all the details regarding the document.
4. Choose 📜. You can view all the documents that have been created for this trading contract and their statuses.
5. You can choose any document in the document flow to navigate to the particular document and view its details.

> i Note
>
> If the trading contract has the status *Ready*, the revenue will be recognized for this contract. If the document has any other status besides *Ready*, *Complete*, or *Obsolete* the document flow will show which stage the trading contract is at. This helps you to know what steps need to take place to complete revenue recognition or purchase realization for the document.

More Information

- Revenue Recognition Processor [page 208]
- Purchase Realization Processor [page 207]

10.7.2 Purchase Realization Processor

Use

This processor evaluates the settlement event registry and initiates the purchase realization for all application document items in which all the settlement event indicators are selected. After purchase realization, application document quantity types are updated in the contract commodity line. If a third party exists, the relevant goods movement indicator is also sent to them.

Features

In third party and intercompany purchase scenarios with contract reference purchases, revenue is realized based on the same settlement event indicators as for revenue recognition in sales scenarios with contract reference.

The *Governing Weight* and *Governing Quality* checkboxes are set during contract application, on the physical receipt of the good. The *Title Transfer* checkbox is set based on incoterms on the contracts during contract application. The *Final Price* checkbox is set during contract settlement. Purchase realization contains an additional checkbox called the *Physical Receipt of Goods*.

A goods movement message with indicator 4 is sent to the third party on the physical receipt of the goods after the realization of an application document. This helps the third party update their inventory with the information that all transactions are complete.

Activities

To realize a purchase, proceed as follows:

1. On the *SAP Easy Access* screen, choose ▌▶ *Agricultural Contract Management* ❯ *Contract Settlement* ❯ *Revenue Recognition* ❯ *Revenue Recognition Processor* ▌
2. Choose *Purchase Realization*.
3. Enter the required details and choose ⊕.
   The purchase realization monitor appears.
4. Choose a document which is in *Ready* status.
5. Choose the *Realize Purchase* pushbutton.
   The status of the document changes to *Complete*.

To update the application document, proceed as follows:

1. Choose the completed document's *Ref. Doc* (Reference Document) field.
   The application document is displayed.
2. In the *Item Overview* group box, choose the *Items* tab page.
3. Choose the line item and then choose ▦.
   The *Item Details* group box gets updated.

4. In the *Item Details* group box, choose the *Status* tab page.
   The *Status Management* group box appears. It displays the statuses and follow-on actions.

5. Choose ⬚ to view the settlement status.
   The *Active Statuses* group box displays that revenue recognition for that document is active. This indicates that purchase has been realized for the particular document.

10.7.3 Revenue Recognition Processor

Use

The Revenue Recognition Processor evaluates the settlement event registry and initiates the revenue and expense recognition for those delivery document items for which final settlement and billing has been performed and where all settlement events have occurred.

For partial application, revenue recognition in a contract settlement scenario is based on separate ABDs. These revenue recognition ABDs create the required reclassification postings in accounting, based on standard account determination. Separate ABDs are created per settlement group. This allows the proper support of foreign currency settlements, as each settlement group may have a different translation date (foreign exchange rate key date).

Revenue recognition ABDs for provisional settlement groups only contain items that relate to settlement units of the final settlement group that is being recognized. In this way, a provisional settlement group can trigger several revenue recognition ABDs (a partial settlement scenario). This is also applicable for split application scenarios, where there are multiple applications for a single delivery item. Each split application can be recognized independently.

Integration

You have integrated the third party trading system, if relevant. For more information, see Possible Third Party Integration [page 220]

Prerequisites

All relevant event registry indicators are set and the entry has the status *Ready*.

Features

- Determines readiness
  Evaluates all settlement event indicators (title transfer, governing weight, governing quality, and final price) based on configuration of these indicators.

- Confirms proof of delivery
  Initiates the required goods movement out of SIT cockpit if material stock is in outbound SIT.
- Recognizes revenue, primary expenses, and accrued expenses
  Determines revenue recognition for all relevant documents of the selected event registry entry and creates the corresponding ABD (Agency Billing Document) to recognize them.
- Recognizes secondary expenses (settled and accrued)
  Determines all accrued and settled expenses relevant for the selected event registry entry and creates the corresponding VBD (Vendor Billing Document) to recognize them.
- Updates the *Quantity Type* table
  Updates the quantity type table for the contract commodity item.
- Provides a *Goods Movement* indicator
  Sends this indicator to the third party, if relevant, and indicates the physical receipt of goods.

An additional feature of the revenue recognition processor is to recognize revenue without reference to a contract. In such a case only a delivery document exists. Following are the features of revenue recognition without reference to contract:

- There is no provisional settlement or billing.
- Governing weight and governing quality are always at origin.
- Prices are always final.
- Quantity, quality, or pricing adjustments are handled through credit and debit memos and the related revenue is recognized immediately.

Activities

To recognize revenue, proceed as follows:

1. On the *SAP Easy Access* screen, choose ▶ *Agricultural Contract Management* 〉 *Contract Settlement* 〉 *Revenue Recognition* 〉 *Revenue Recognition Processor* 〉.
2. Choose *Revenue Recognition Processor*.
3. Enter the required details and choose 🕒.
   The revenue recognition monitor appears.
4. Choose a document which is in *Ready* status.
5. Choose the *Recognize Revenue and Expenses* pushbutton.
   The status of the document changes to *Complete*.

To update the application document, proceed as follows:

1. Choose the completed document's *Ref. Doc* (Reference Document) field.
   The application document is displayed.
2. In the *Item Overview* group box, choose the *Items* tab page.
3. Choose the line item and then choose 🖳.
   The *Item Details* group box gets updated.
4. In the *Item Details* group box, choose the *Status* tab page.
   The *Status Management* group box appears. It displays the statuses and follow-on actions.
5. Choose the 🖳 to view the settlement status.
   The *Active Statuses* group box displays that revenue recognition for that document is active. This indicates that revenue has been recognized for the particular document.

The following activities take place for a revenue recognition scenario without reference to contract:

- The delivery document notifies the Revenue Recognition Monitor to create a new registry entry.
- On creation of a new entry, the settlement event indicators for governing weight, governing quality, and final price are set automatically.
- There are no references to application documents or settlement documents.
- There are no related VBDs representing secondary expenses.
- The third party trading system is not updated.

10.8   Storage Settlement

Use

Storage settlement refers to the process of settling 3rd party goods that are in storage at a plant.

Storage settlement is made up of the following types of settlements:

- Unload Based Storage Settlement: This type of settlement is a time based storage settlement. Only application document items that are assigned to unload based storage agreements are settled. To run an unload-based storage settlement you must define the run date. Only application documents that have a storage start date earlier than the run date are settled. Application documents that have a storage end date later or equal to the run date are assigned the *Intermediately Storage Settled* status after their storage settlement is approved. Application documents that have a storage end date earlier than the run date are assigned the *Finally Storage Settled* status. For unload based storage settlements, each settlement unit represents a storage history period for an application document. These storage periods are created using unload history logic.
- Inventory-Based Storage Settlement: Inventory based storage settlements are quantity based settlements. Only application document items that are assigned to inventory based storage agreements are settled. To run an inventory based storage settlement you must define a storage start and end date. For inventory based storage settlements, each settlement unit represents an inventory quantity during a specific period of time. This inventory quantity is made up of all application items that either started or ended their storage periods between the storage start and end date. Also, these application document items are selected and grouped by the following criteria:
  - Payer
  - Vendor
  - Plant
  - Storage Agreement
  - Storage Agreement Item
- Accrual Storage Settlement: This type of settlement is a sub type of the unload based storage settlement and inventory based storage settlement. Accrual storage settlement allows you to recognize economic events by matching revenues to expenses at the time the transaction occurs rather than when payment is made (or received). This method allows current cash inflows and outflows to be combined with future expected cash inflows and outflows and gives a more accurate picture of the current financial situation.

You can only settle application documents that are assigned to storage agreements and have either of the following storage settlement statuses:

- Ready for Storage Settlement
- Immediately Storage Settled

Once the application document is settled, the storage settlement status is set to either of the following statuses:

- Intermediately Storage Settled
- Finally Storage Settled

For each storage settlement type, the system calculates the storage and event fees. You can configure daily, weekly, monthly and annual fees as well as fixed fees.

Prerequisites

- You have configured the following Customizing activities in Customizing for *Logistics - General* under ▶️ *Agency Business* ❯ *Basic Settings* ❯ *Define Price Determination Process* ▶️
  - Define Access Sequences
  - Define Condition Types
  - Define Calculation Schema
  - Calculation Schema Determination
- You have configured the pricing schema used in the calculation of storage fees for storage settlement in Customizing for *Agricultural Contract Management* under ▶️ *Contract Settlement* ❯ *Settlement Document* ❯ *Define Storage Settlement Pricing Schema* ▶️

> i Note
>
> If the Source and Target Currencies for the Settlement are different, then the FX functionality needs to be used for negotiation. For more information, see FX Functionality in Storage Settlement [page 214]

More Information

For more information about storage settlement pricing, see Storage Fees [page 211].

10.8.1 Storage Fees

Use

Storage fees are specific pricing conditions assigned to storage agreements. Storage fees determine how much is charged for storage. Storage fees also define the event fees assigned to specific application documents. The following storage fee types are available:

- Flat rate: A single rate calculated as (USD rate) * (Quantity) * (Day). For example, if the storage fee is defined as 1 USD per LB per day, and a load of 100LBs is stored for 10 days, then the total storage fee is $1000 USD.
- Tiered graduated scale for unload-based agreement: For unload-based agreements, all calculations are applied for each single stored commingled application document, which represents a load (or part of a load) in storage. By using a tiered graduated scale condition, you can define how much to charge for each tier of days for a given quantity.
- Tiered graduated scale for volume-based agreement: For volume-based agreements (or inventory-based), all calculations are applied to the sum of stored commingled application documents that are linked to the same storage agreement. By using a tiered graduated scale condition, you can define how much to charge for each material volume for a specific time period (in the example below, for each day).
- Events: Events are a special type of fee that are assigned directly to application documents. The amount charged by events is defined within storage agreements. Events can be either a single-charge event (that is, the event can only occur once for an application document), or a periodic event (the event can occur more than once).

Example

Tiered Graduated Scale for Unload-Based Agreement

You receive two loads. The first load of 100LBs stays in storage for 150 days and the second load of 100LBs stays in storage for 30 days.

Scales

Scale	Unit of Measure	Amount	Period
0	Day	1.00 USD	per LB
100	Day	.50 USD	per LB
200	Day	.10 USD	per LB

Process Events

What	When	Inventory
Load 1	March 1	+100LBs
Load 2	June 29	+100LBs
Settlement	July 29	

The following calculation is applied. (Note the tiered calculation.)

	Calculation	Totals
Load 1	Tier 1: 100 Days * 1.00 USD * 100 LBs = 10000 USD	Total charge for this load: 12500 USD
	Tier 1: 100 Days * 1.00 USD * 100 LBs = 10000 USD	
Load 2	Tier 1: 30 Days * 1.00 USD * 100 LBs = 3000 USD	Total charge for this load: 3000 USD
Settlement	Total charge for both loads: 15500 USD	

Tiered Graduated Scale for Volume-Based Agreement

You receive three loads. The first load consists of 100 LBs, the second load of 100 LBs and the third load of 800 LBs. The farmer then removes then 800 LBs from storage on January 25.

Scales

Scale	Unit of Measure	Amount	Period
0	LB	1.00 USD	per day
100	LB	.50 USD	per day
1000	LB	.10 USD	per day

Process Events

What	When	Inventory
Load 1	January 1	+100LBs
Load 2	January 10	+100LBs
Load 3	January 20	+800LBs
Loudout 1	January 25	-800LBs
Settlement	January 30	

The following calculation is applied. The calculation is split by aggregated inventory quantities and then applied to the pricing table. The calculation shows that each period is defined by the total inventory and then run through the tiered calculation procedure.

	Events	Totals
Period 1	From January 1 to January 10	Total charge for this period: 1000 USD
	Inventory: 100LBs in stock	
	Tier 1: 100LBs * 1.00 USD * 10 days = 1000 USD	
Period 2	From January 1 to January 20	Total charge for this period: 1500 USD
	Inventory: 200LBs in stock	
	Tier 1: 100LBs * 1.00 USD * 10 days = 1000 USD	
	Tier 2: 100LBs * 0.50 USD * 10 days = 500 USD	
Period 3	From January 20 to January 25	Total charge for this period: 1150 USD
	Inventory: 1000LBs in stock	
	Tier 1: 100LBs * 1.00 USD * 5 days = 500 USD	
	Tier 2: 100LBs * 0.50 USD * 5 days = 250 USD	
	Tier 3: 800LBs * 0.10 USD * 5 days = 400 USD	
Period 4	From January 25 to January 30	Total charge for this period: 1100 USD
	Inventory: 900LBs in Stock	
	Tier 1: 100LBs * 1.00 USD * 5 days = 500 USD	
	Tier 2: 100LBs * 0.50 USD * 5 days = 250 USD	
	Tier 3: 700LBs * 0.10 USD * 5 days = 350 USD	
Settlement	Total charge for both loads: 4750 USD	

10.8.2 FX in Storage Settlement

Use

This process is used to implement the FX functionality in Storage Settlement.

Prerequisites

To implement the FX functionality in Storage Settlement, the following prerequisites need to be considered:

- The prerequisites for this process are the same as those required to execute a Storage scenario for Contract Settlement. For more information, see Storage Settlement [page 210]
- The source and target currencies are different and the settlement is an international settlement.

Process

Target Currency not Given

If the target currency is not given initially, proceed as follows:

- When the *Target Currency* is not given on the selection screen, the *Source Currency* will be the Pricing Currency of the Storage Contract, where pricing is maintained in *MEK1*.
- In this case, the Target Currency will be the Contract Currency.
- In the *Group FX* tab of Settlement Group and the *FX* tab of Settlement Unit corresponding Source and Target Currencies will be shown.
- If both the Source and Target Currencies are different, the negotiated FX rate can be provided and re-pricing can be done to recalculate the settlement amounts.

Target Currency is Given

If the Target Currency is given initially, proceed as follows:

- When the Target Currency is given on the selection screen, the Source Currency shall be the Pricing Currency of Storage Contract, where the pricing is maintained in *MEK1*.
- In this case, the *Target Currency* shall be the currency given on the selection screen.
- This new target currency will flow in the *Group FX* tab of Settlement Group and *FX* tab of Settlement Unit. The corresponding *Source Currency* and *Target Currency* will be shown in the screen fields.
- If both the source and target currencies are different, the negotiated FX rate can be provided and re-pricing can be done to recalculate the settlement amounts.

Previous Settlement Currency

- When the first Storage Settlement is created for a commingled Application doc, the settlement document shall have a source and target currency.
- This target currency shall be the settlement currency in which the settlement shall be created.
- With each subsequent Storage Settlement that is created for the same commingled Application Document, the target currency shall be the currency of the previously created settlement. This shall follow for each subsequent settlements, for the same Application Document, irrespective of whether the target currency is given in the selection after the first settlement or not. This will happen until we reverse the settlement documents and start re-settlement of the same Application Document.
- After reversing all the settlements, if we provide a new target currency, all the subsequent settlements will follow the same target currency.

> **i Note**
>
> All the subsequent Storage Settlement documents follow the previous settlement currency until all the previous settlement documents are reversed.

11 Inventory True-Up

Use

The ability to track and capture inventory levels is an important function within a trading organization. In order to accurately portray the commodity positions, inventory data for commodities must be available in third party systems (3PT).

Inventory true-up synchronizes the stock levels in your system with third party (3PT) systems. The systems are synchronized using goods movement messages. Contract-related goods movement messages are sent from system to system in real time. All other non contract-related goods movement messages are sent in an overnight batch update. The system retrieves the current stock positions for each plant/storage location and material combination and sends this information on to the 3PT system

There are various events that trigger goods movement (GM) updates in the system, for example, contract application, contract settlement, and inventory true-up reversal. When one of these events occurs in the system, this information must be sent to the third party (3PT) system to ensure both system systems remain synchronized. The GM information can be sent in real-time or in batch updates.

Real-time updates happen as and when they are triggered in your system. These updates are reflected on the 3PT's side immediately. The following are the events that trigger real-time updates:

- Provisional contract application
- Final application
- Provisional contract settlement
- Final settlement - Revenue recognition
- Contract application reversal
- Settlement reversal

Pricing lot distribution information is sent using a batch update, which you can configure to run at your desired frequency.

Implementation Considerations

The `ACCGO/SWITCH_3PT` switch must be activated so that true-up messages can be sent to a third party system.

Integration

SAP Process Integration is used to link the ERP system and 3PT system.

More Information

11.1 Inventory True-Up

Prerequisites

- You have mapped the *SAP Agricultural Contract Management* plant and storage location combination to the corresponding storage level in the third party trading system in Customizing for *Agricultural Contract Management* under ▌▶ *Setup for Master Data* ❯ *Map Plant/Storage Location to 3rd Party Storage Level* ❩
- You have implemented the *Cross Reference ECC Storage Location with Third Party Storage Location* BAdI in Customizing for *Agricultural Contract Management* under ▌▶ *Enhancements Using Business Add-Ins* ❯ *Inventory True-Up* ❯ *Cross Referencing Storage Locations* ❩
- You have implemented the *Calculate Unrestricted Quantity of Stock* BAdI in Customizing for *Agricultural Contract Management* under ▌▶ *Enhancements Using Business Add-Ins* ❯ *Inventory True-Up* ❯ *Maintenance of Stock* ❩
- You have implemented the *Calculate Total True-Up Amount* BAdI in Customizing for *Agricultural Contract Management* under ▌▶ *Enhancements Using Business Add-Ins* ❯ *Inventory True-Up* ❯ *Maintenance of True-Up Amount* ❩

Context

Inventory true-up ensures that the inventory levels in your system are up to date and accurately reflected in a 3PT system.

Procedure

1. On the *SAP Easy Access* screen, choose ▌▶ *Agricultural Contract Management* ❯ *Tools* ❯ *Inventory True-Up Run* ❩

2. Enter the material or plant details, or a combination of both, depending on what data you want to base your inventory true-up run on.

3. Uncheck the *Simulation* checkbox and choose ⊕.

   To simulate an inventory true-up run and view the messages that will be generated when you execute the inventory true-up, you can leave the *Simulation* checkbox checked.

Results

The system generates the true-up messages and sends them to the 3rd party system. The messages contain the following information:

- Plant details
- Storage location
- Material details
- True-up quantities
- UoM for quantities

12 Possible Third Party Integration

Use

Agricultural commodity management may require sophisticated risk analytics, portfolio management, and granular relationships with financial instruments. These requirements may be managed outside of the SAP system.

To fulfill such requirements, *SAP Agricultural Contract Management* offers the functions that enable the possibility of integration with a third party trading system (3PT).

Under the integrated system landscape, position related updates are sent between the 3PT and SAP ERP (ERP) systems. The contract capture and changes are initiated in 3PT, and then sent to ERP via the messages.

Implementation Considerations

To integrate with a 3PT system, the relevant switch must be activated, so that messaging between the *SAP Agricultural Contract Management* (in SAP ERP) and the 3PT is possible.

You can make this setting under the Customizing for ▐▶ *Logistics - General* ❯ *Global Trade Management* ❯ *Agricultural Contract Management* ❯ *Basic Settings* ❯ *Activate Switch for Systems Integration* ▐.

The following options are available:

- *ECC Only Solution*
  This means that the system is not integrated with a third party trading system.
  Activate the switch `/ACCGO/SWITCH_ECC`.
- *3rd Party Integration*
  This means that the system is integrated with a third party trading system.
  Activate the switch `/ACCGO/SWITCH_3PT`.

> ⚠ Caution
>
> Once you have activated an option, it is not possible to change this Customizing setting.

Integration

SAP NetWeaver Process Integration (SAP PI) is used to link the SAP ERP system and a 3PT system.

Constraints

Depending on the implementation of the *SAP Agricultural Contract Management* solution and a 3PT system to be integrated, additional development as well as additional master data from SAP ERP, configuration or transactional data and the like may be required. In addition, a 3PT system may impose further restrictions on use of the solution, for example, limits on reference data to be used in contracts, limits on tolerance schedule definition and so on.

These constraints are outside the scope of this solution and should be addressed as an implementation consideration.

12.1   Third Party Integration using SAP PI

Use

For integrating a third party trading system (3PT) with *SAP Agricultural Contract Management* (in SAP ERP), SAP NetWeaver Process Integration (SAP PI) is used.

Features

As an integration option, *SAP Agricultural Contract Management* can be integrated with a 3PT system for additional functions such as risk analytics and portfolio management. In this scenario, contracts are captured through the 3PT system. The 3PT system then sends the data for any new contracts, contract amendments, or cancellations to *SAP Agricultural Contract Management*. In turn, *SAP Agricultural Contract Management* sends certain information to the 3PT system.

This includes the following types of information:

- Reference data, such as discount premium quality schedules (DPQS), tolerance schedules, and optionality categories
- Amendment and cancellation data
  In addition, the data associated with contract creation and the *Ready to Price* indicator is sent to the 3PT for the case of spot contract.
- Pricing consumption at certain goods movements or settlement events
- Goods movement information

More Information

- For more information on individual functions, see the followings:
  -
  -

- For more information on the PI Content that is supported as part of *SAP Agricultural Contract Management*, see .

12.1.1 Reference Data Transfer

Use

If the third party integration is activated with *SAP Agricultural Contract Management*, capturing of commodity contracts from the third party trading system (3PT) is supported.

This includes the capturing of information such as discount premium quality schedule (DPQS), tolerance schedule, and so on.

The 3PT system conducts validations during contract capture, for example to ensure that a DPQS is valid for the entered material, that the tolerance schedules are consistent and so on.

Features

Prior to its use in contracts in the 3PT system, reference data must be transferred from *SAP Agricultural Contract Management* (in SAP ERP) to the 3PT.

The reference data includes:

- Governing Weight
- Governing Analysis
- DPQS Volume Schedule
- DPQS Value Schedule
- Tolerance Schedules

More Information

12.1.2 Amendments and Cancellations

Use

This section describes the amendment and cancellation process when a third party trading system (3PT) is integrated with *SAP Agricultural Contract Management*.

Prerequisites

- A third party trading system (3PT) is available and integrated with *SAP Agricultural Contract Management* (in SAP ERP) using the SAP NetWeaver Process Integration (SAP PI).
- A trading contract (TC) is available in the 3PT.

Features

All contract amendments and cancellations are initiated in the 3PT system and sent to the corresponding contract in the SAP ERP system.

If a cancellation or an amendment is initiated, the 3PT triggers a validation message to the ERP to ensure that the requested change is permissible in the ERP side based on any potential logistics execution that have already occurred.

If the requested change is approved by the ERP, the 3PT can proceed with the message to update the contract.

If it is not approved, the 3PT system displays the reason for rejection for user to make any necessary changes.

Example

The following table summarizes the steps that take place in a quantity reduction process:

Step	3PT	PI	ERP
1	Cancel the quantity by reducing the contract quantity for delivery period	-	-
2	-	Trigger a pre-cancellation validation message to ERP	-
3	-	-	Check if the quantity to be cancelled is available for call-off and no pre-payment exists for the quantity • If the quantity is available, the validation passes • If not, the validation fails
4	-	Send a notification message regarding the validation to 3PT	-
5	Save the change, if the validation passed	-	-
6	-	Send a notification message to ERP	-

More Information

12.1.3 De-pricing

Use

This section describes the de-pricing process when a third party trading system (3PT) is integrated with *SAP Agricultural Contract Management*.

Using de-pricing function you can temporarily remove the pricing of a lot quantity and later re-price that same lot with different values. Such price changes can occur at any point until final settlement because during final settlement, the pricing lot is locked.

Prerequisites

- A third party trading system (3PT) is available and integrated with *SAP Agricultural Contract Management* (in SAP ERP) using the SAP NetWeaver Process Integration (SAP PI).
- A trading contract (TC) is available in the 3PT.

Features

All de-pricing changes are initiated in the 3PT system and sent to the corresponding contract in the SAP ERP system.

If a de-pricing is initiated, the 3PT triggers a validation message to the ERP to ensure that the requested change is permissible in the ERP side based on any potential final settlement and price locking (manual or at business unit level) that have already occurred.

If the requested change is approved by the ERP, the 3PT can proceed with the message to update the contract.

If it is not approved, the 3PT system displays the reason for rejection, so that the user can make any necessary changes.

Example

The following table summarizes the steps that take place in a de-pricing process:

Step	3PT	PI	ERP
1	De-price the quantity by removing the price amount for a portion of one pricing lot quantity	-	-
2	-	Trigger a pre-cancellation validation message to ERP	-
3	-	-	Check if the relevant pricing lot has already been used for final settlement or locked • If the pricing lot has been used or locked, the validation fails • If not, the validation passes
4	-	Send a notification message regarding the validation to 3PT	-
5	Save the change, if the validation passed	-	-
6	-	Send a notification message to ERP	-

More Information

Commodity Pricing Engine [page 63]

12.1.4 Goods Movement Messages

Use

There are various events that trigger goods movement (GM) updates in the system, for example, contract application, contract settlement, and inventory true-up reversal. When one of these events occurs in the system, this information must be sent to the third party trading system (3PT) to ensure both ERP and 3PT systems remain synchronized.

For this purpose, goods movement messages are used.

Prerequisites

- You have maintained the mapping between the plant and storage location combination and the corresponding storage level in the third party trading system in Customizing for ▶ *Logistics - General* ▶ *Global Trade Management* ▶ *Agricultural Contract Management* ▶ *Setup for Master Data* ▶ *Map Plant/ Storage Location to 3rd Party Storage Level* ▶ .
- You have maintained the required master data settings in the Business Rule Framework plus.
- You have implemented the BAdI *Cross Reference ECC Storage Location with 3PT Storage Location* in Customizing for ▶ *Logistics - General* ▶ *Global Trade Management* ▶ *Agricultural Contract Management* ▶ *Enhancements Using Business Add-Ins* ▶ *Inventory True-Up* ▶ *Cross referencing Storage Locations* ▶ *BAdI: Cross Reference ECC Storage Location with 3PT Storage Location* ▶
- You have implemented the BAdI *Calculate Unrestricted Quantity of Stock* in Customizing for ▶ *Logistics - General* ▶ *Global Trade Management* ▶ *Agricultural Contract Management* ▶ *Enhancements Using Business Add-Ins* ▶ *Inventory True-Up* ▶ *Maintenance of Stock* ▶ *BAdI: Calculate Unrestricted Quantity of Stock* ▶

> i Note
>
> The BAdI implementations above are optional.

Features

The GM information can be sent in real-time or in batch mode.

Real-time updates happen as and when they are triggered in the ERP system. These updates are reflected on the 3PT side immediately.

The following are the events that trigger real-time updates:

- Provisional contract application
- Final application
- Provisional contract settlement
- Final settlement - Revenue recognition
- Contract application reversal
- Settlement reversal

The pricing lots received from the 3PT system can be distributed in the ERP system by scheduling the *Pricing Distribution Run* program (`/ACCGO/PRC_BATCH_DISTRIBUTION`) as a background job.

You can configure to run the background job at your desired frequency.

More Information

Inventory True-Up [page 218]

13 Operations Information

Certain administrative activities are required for the proper functioning of *SAP Agricultural Contract Management*. These are periodic activities that affect areas of data integration, data consistency, and system performance. The following activities are specific to the solution:

13.1 Archiving

Use

This section pertains to the regular administrative task of archiving data from the transaction tables of *SAP Agricultural Contract Management*.

Prerequisites

You have made the required settings for Archiving in Customizing under ▶ *SAP Customizing Implementation Guide* ▶ *Logistics-General* ▶ *Global Trade Management* ▶ *Agricultural Contract Management* ▶ *Enhancements Using Business Add-Ins* ▶ *Archiving*. ▶

Features

SAP Agricultural Contract Management uses its own namespace (/ACCGO/) for storing application-specific data.

- The standard archiving object `WB2` has been enhanced for archiving of custom tables that have been enhanced through `WB21`.
- The standard archiving object `MM_EKKO` & `SD_VBAK` has been enhanced for archiving of *Purchase Order* or *Sales Order* relevant data.
- The standard archiving object `SD_VBRK` has been enhanced for archiving of billing documents.
- A new archiving object `/ACCGO/APS` has been created for archiving of *Contract Application*, *Contract Settlement, Load Data Capture*, and Event Registry transactional data.

13.2 Monitoring

Use

Monitoring is an essential task within *SAP Agricultural Contract Management*.

Features

For more information about standard monitoring tools, see http://help.sap.com ⤳ ▷ *SAP NetWeaver* ❯ *SAP NetWeaver 7.3 Including Enhancement Package 1* ❯ *Technical Operations for SAP NetWeaver* ❯ *English* ❯ *Administration of Application Server ABAP* ❯ *Monitoring and Administration Tools for Application Server ABAP* ❯ *Monitoring in the CCMS* ◁

13.3 Error Handling

Use

The standard error handling capabilities are provided with *SAP Agricultural Contract Management*.

When third party (3PT) integration is active, the error handling takes care of monitoring of messages between *SAP Enterprise Resource Planning* (ERP), *SAP Process Integration* (PI), and 3PT systems.

Features

- A global unique identifier (GLOBAL_UUID) ensures that all messages across SAP ERP, PI and 3PT system are uniquely identified. A reference UUID (REFERNCE_UUID) is filled in the response message (asynchronous or synchronous) along with the global UUID of the request message.
  The application log is enhanced for error messages in SAP ERP. You can access this application log using the transaction /ACCGO/APPL_LOG_DISP. The error or success messages, which originate from any application run or from interface message processing, are captured in this application log. This application log displays the following information:
  - Message ID
  - Message Class
  - Message Number
  - Message Type
    Indicates whether the error is either information or warning or error or abort or success message
  - Timestamp

- - Message Text
  - Message details
    For example, *Unique ID*, *Interface Number* or Name, *Source*, and *Target Application* or Module.
  - Key information-specific to the error
    For example, *Contract Number* or *Material ID* and so on.
  - Scenario Quantity or UoM
- The standard monitoring tool (technical name: `SXMB_MONI`) is used for monitoring data. In addition to this, a similar interface monitor (technical name: `/ACCGO/INT_MONI`) with enhanced functionality has been created. This new tool enables you to retrigger erroneous messages and also outbound messages that are waiting to be sent.
  The interface monitor has the following features:
  - Enables retriggering of multiple outbound messages that are in error or waiting state.
  - Disables you from triggering messages that have been retriggered and processed successfully.
    Once a message has been retriggered successfully, the status of the message changes to retriggered.
  - Displays asynchronous response for selected outbound messages.

13.4 Transport and Change Management

The standard procedures of SAP NetWeaver apply for transport and change management issues.

For more information, see the **Technical Operations Manual for SAP NetWeaver** on SAP Help Portal at http://help.sap.com ⭐▷ *SAP NetWeaver* ▷ *SAP NetWeaver 7.3 Including Enhancement Package 1* ▷ *Technical Operations for SAP NetWeaver* ▷ *English* ▷ *Administration of Application Server ABAP* ▷ *Change and Transport System.* ▷

14   Country-Specific Features

The following section describes which country-specific functions are supported in *SAP Agricultural Contract Management.* The documentation provides an overview of the business processes, the associated Customizing activities, and transactions or reports available in the system.

The functions documented here are functions that are not otherwise covered by the generic *SAP Agricultural Contract Management*. The solution provides these additional functions to enable you to meet your country-specific requirements.

14.1   Brazil

14.1.1 Contract Capture and Maintenance

14.1.1.1 Material Usage

Use

Commodity contracts for Brazil-based company codes have an additional field for *Material Usage*. The material usage is maintained using SAP standard material classification, and it is used for tax determination during the contract settlement process.

Prerequisites

You have maintained your material master data.

Activities

During contract settlement, the system retrieves the material usage from the purchase order (PO). If the material usage is not available on the PO, the system retrieves the material usage from the material master data. The system uses the material usage to determine the correct Código Fiscal de Operações e Prestações

(CFOP), which is then used to calculate the correct taxation. For example, Programa de Integração Social (PIS) and Contribuição para Financiamento da Seguridade Social (COFINS) are calculated based on the material usage information.

In a commodity contract, you can view the *Material Usage* on the *Brazil* tab page for a commodity item.

14.1.1.2 Royalties Agreement Classification

Use

In third party commodity purchases, which involve GMO (Genetically Modified Organism) products, you need to verify whether the commodity vendor has a royalty agreement with the biotechnology vendor. Depending on the type of the existing agreement, the company that receives the commodity will be responsible to pay a percentage of royalties to the biotechnology vendor who is the patent owner.

During Contract Capture and Maintenance, you can set the GMO Relevancy and provide the vendor, the agreement, description of the technology, and the percentage of royalties to be paid to the biotechnology vendor. You can also set or change the values for royalties calculation while receiving the load in Load Data Capture. Based on the Business Add-In (BAdI) implementation, the system then copies these values to the financial document and the percentage of royalties will be calculated accordingly.

> **i Note**
>
> While creating an LDC Object, you can set or change the GMO Relevancy values only when the *Unload Event* is selected in the LDC General Information section. The Royalties information can be then maintained under Royalties tab.

Prerequisites

- You have maintained the Customizing to set the royalties percentages in Customizing for Agricultural Contract Management under ⫸ *Country-Specific Settings* ❯ *Brazil* ❯ *Royalties* ❯
- You have implemented and activated the provided Business Add-In (BAdI) for Royalties calculation at Contract Settlement (Invoicing Process).

Activities

To classify a contract as Royalties agreement, you set the GMO Relevancy at the ACM contract header level or during the Load Data Capture level.

1. On the SAP Easy Access screen, choose ⫸ *Agricultural Contract Management* ❯ *Contract Management* ❯ *Commodity Contract* ❯ *Change* ❯ .
   Alternatively, you can execute transaction WB22.

2. Enter a trading contract number, which has a Royalties Agreement, in the *Trading Contract* field and choose Execute.

3. Select the *GMO Relevancy* check box.

4. Select the relevant biotechnology vendor from the *Vendor* field.

5. Select the specific agreement from the *Royalties' Agreement* field.
   Based on the above selections and the values maintained in the Royalties Customizing, the values in the Royalties Technology and Percentage fields get populated.

6. Choose 💾.

14.1.2 Expense Management

14.1.2.1 Accruing Expenses

Use

To accrue a planned or unplanned expense, you post an agency business document (ABD) with the expense details from the trading contract.

Prerequisites

- You have a trading contract.
- You have set the relevancy of billing types in Customizing for *Agricultural Contract Management* under ▶ *Country-Specific Settings* 〉 *Brazil* 〉 *Expense Management* 〉 *Set Relevancy of Billing Types for Brazilian Expense Processes* 〉.
- You have mapped the sales area and ABD billing types in Customizing for *Agricultural Contract Management* under ▶ *Country-Specific Settings* 〉 *Brazil* 〉 *Expense Management* 〉 *Map Sales Area and ABD Billing Type to Sales Billing Type* 〉.
- You have mapped the expense condition type to the material in Customizing for *Agricultural Contract Management* under ▶ *Country-Specific Settings* 〉 *Brazil* 〉 *Expense Management* 〉 *Map Expense Condition Type to Material* 〉.

Procedure

Accruing a Planned Expense

1. On the *SAP Easy Access* screen, choose ▶ *Agricultural Contract Management* 〉 *Contract Management* 〉 *Commodity Management* 〉 *Display* 〉. Alternatively you can execute transaction `WB23`.

2. Enter a trading contract number in the *Trading Contract* field and choose 🔧.

3. In the *Planned Conditions* table, select the planned expense and choose 🗐.

4. In the *Overview of Expenses Documents for Previous Docs* table, enter the missing information.

5. Choose 💾.

Accruing an Unplanned Expense

1. On the *SAP Easy Access* screen, choose ▶ *Agricultural Contract Management* ❯ *Contract Management* ❯ *Commodity Management* ❯ *Display* ❯. Alternatively you can execute transaction `WB23`.

2. Enter a trading contract number in the *Trading Contract* field and choose 🔧.

3. In the *Overview of Expenses Documents for Previous Docs* table, enter the necessary information.

4. Choose 💾.

Result

You have accrued an expense and created an ABD that describes the expense ready to be settled.

More Information

14.1.2.2 Settling Expenses

Prerequisites

- You have carried out the *Accruing Expenses* procedure and posted the accrual ABD.
- You have set the relevancy of billing types in Customizing for *Agricultural Contract Management* under ▶ *Country-Specific Settings* ❯ *Brazil* ❯ *Expense Management* ❯ *Set Relevancy of Billing Types for Brazilian Expense Processes* ❯.
- You have mapped the sales area and ABD billing types in Customizing for *Agricultural Contract Management* under ▶ *Country-Specific Settings* ❯ *Brazil* ❯ *Expense Management* ❯ *Map Sales Area and ABD Billing Type to Sales Billing Type* ❯.
- You have mapped the expense condition type to the material in Customizing for *Agricultural Contract Management* under ▶ *Country-Specific Settings* ❯ *Brazil* ❯ *Expense Management* ❯ *Map Expense Condition Type to Material* ❯.

Context

Once an expense is accrued, it must be settled. When you settle an expense, the system creates an invoice with an incoming nota fiscal or a billing document with an outgoing nota fiscal.

Procedure

1. On the *SAP Easy Access* screen, choose ▶ *Logistics* ❯ *Global Trade Management* ❯ *Trading Contract* ❯ *Environment* ❯ *Trading Expense Workbench* . Alternatively, you can execute the transaction `WB2_EWB` .

2. Enter the trading contract number in the *Trading Contract* field and choose.

3. Select the line with the expense that you want to settle and choose.

4. Select the line with the expense you want to settle and choose.

5. Select the expense in the *Documents For Settlement* table.

6. Choose

7. Choose

Results

You have settled the expense and created an invoice with an incoming nota fiscal or a billing document with an outgoing nota fiscal.

> **i Note**
>
> When you settle a purchasing expense, the system creates an invoice with the status *On-hold.* To post the attached nota fiscal, you must enter additional details (such as the nota fiscal number and type) to the invoice before the nota fiscal can be posted.

14.1.2.3 Document Flow

Use

For Brazil, the system generates the invoice verification documents after expenses are settled, and adds them to the standard document flow tree.

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Integration

The invoice added to the standard document flow tree is created in the background by the *Material Management* component and the billing document is created by the *Sales and Distribution* component.

More Information

Document Flow [page 86]

14.1.3 Load Data Capture

14.1.3.1 Load Data Capture Workcenter

Use

The Load Data Capture (LDC) Workcenter is a repository where users can enter and update load information to capture, on arrival, certain attributes of a purchased load. Users can configure the available settings to capture inbound and outbound event data, determine material, perform various maintenance tasks for LDC objects, and trigger the Orchestration Framework [page 108] to generate follow-on logistical documents. Fast entry screens are provided for users to enter event data, weights and analysis details, transportation information, and other general information.

In addition, for Brazilian customers, a tab page with country-specific fields is available. To avoid irrelevant data fields appearing to companies located out of Brazil, the processes and data fields relevant for Brazil are identified through the company code. When the output confirms that the process under execution is for a Brazilian company code, additional (Brazil-specific) data fields are available for viewing on the LDC screen.

Integration

The nota fiscal (NF) is a legal document that accompanies all goods deliveries in Brazil. It serves as the delivery note and as the invoice, against which the customer makes payment. In addition, it includes all tax-related information, which is later required for financial reporting to the tax authorities.

Prerequisites

Before using the Load Data Capture Workcenter, you must configure your settings in Customizing for Load Data Capture and the Orchestration Framework under ▮▸ *SAP Agricultural Contract Management* ▸ *Load Data*

Capture . Here, you define, for example, the LDC event type, the analysis type, the application instruction, and MoT-relevant attributes.

Features

The Load Data Capture Workcenter provides the following capabilities for Brazilian customers:

- Captures the commodity volume printed on incoming notas fiscais.
- Captures incoming nota fiscal numbers of the paper-based NF.
- Captures incoming NF total amounts.
- Captures freight invoice numbers for specific load.
- Captures tax ID and the external delivery notes for special operations.
- Displays the logistically adjusted quantity (LAQ) for deliveries from natural persons, which not have notas fiscais. See Goods Receipt with Logistics Adjusted Quantity [page 238].
- Provides a customer-specific Business Add-In (BAdI) to allow users to determine whether a load is acceptable or not, based on sustainability criteria.

Activities

On the *Brazil* tab, you can do the following when creating or changing an LDC object:

- Make settings for the Brazil-specific nota fiscal. You can indicate whether or not there is a nota fiscal that can be used as a reference document, and enter (amongst other settings) the NF ID, amount, and volume.
- Make settings for , if relevant.
    - For triangular operation, see Triangular Operation [page 257].
    - For future delivery, see Future Delivery [page 255].
    - For commingled stock, see Commingled Stock Features [page 249]
- Indicate whether or not the vendor is a natural person.
- Split an LDC event into multiple child events for vendors with different notas fiscais. See Load Data Capture: Split for Several Notas Fiscais [page 237].

On the *Weights Details* tab page, you can do the following when creating or changing an LDC object:

- If there is a valid nota fiscal, you have an option to select *04: Nota Fiscal* as the certificate category.

To implement the BAdI for the sustainability request, navigate to the enhancement spot `/ACCGO/CMN_ES_UIS` in the BAdI Builder, and create an enhancement implementation for LDC event business logic (`/ACCGO/ UIS_BADI_EVNT_BL`)..

14.1.3.2 Load Data Capture: Split for Several Notas Fiscais

Use

This function enables you to split Load Data Capture [page 97] unload events among several vendors in Brazil. When processing an unload event, you can split the load among multiple vendors with different notas fiscais, including vendors with the natural persons legal nature, who have no nota fiscal.

Split functionality for vendors with different notas fiscais is only available for load data capture objects with application instructions 82: *Brazil LDC Split*.

When you split an LDC event, the "parent" event, the system creates one "child" LDC event for each vendor added in the split screen. These child events are then processed individually in the standard way.

More Information

14.1.3.2.1 Splitting Events among Several Vendors in Brazil

To split an event among several vendors, who have different notas fiscais, including vendors of the Natural Person legal nature, complete the following steps.

1. On the LDC screen, select or create the event for which you want to make the split.
   The LDC object must be assigned application instructions 82: Brazil LDC split. If you are creating a new object, note that the vendor field is **not** mandatory for objects with this application instruction.
2. On the *Weight Details* tab, maintain information regarding the total load of the shipment, such as the shipment's Gross *Weight*.
3. Choose 🔳. The *Split Events Weight* dialog appears.
4. Choose 🔳 to add a vendor and maintain the information about that vendor's share of the shipment. If the vendor is a natural person, leave the *Nota Fiscal ID* field blank.
5. Choose 🔳 to have the system to distribute the total gross weight proportionally based on the weights you maintained for each split. Alternatively, you can click the *Change* checkbox to maintain the proportion for an individual split manually.
6. The traffic light by the *Split Weight* line at the bottom of the dialog indicates whether the split has been maintained correctly. The *Split Weight* and *Unload Weight* must be equal
7. Choose 🔳, then proceed with the normal LDC process.
8. When you release the LDC for which you created the split, considered the "parent" LDC, the system automatically generates "child"LDCs for each vendor included in the split.
   From this point on, the separate child LDCs continue on their own for further processing. For instance, you will need to provide appropriate application instruction and contraction information for each child LDC and release them individually.

> **i Note**
>
> You can choose ⊡ while reviewing an event in order to identify the child LDCs created by an earlier split in the *Generated LDC ID* field. Also, when reviewing a child LDC, you can click the *Go to Parent Split* button to navigate directly to the parent LDC from which the child was created.

14.1.3.3 Goods Receipt with Logistics Adjusted Quantity

Use

In the SAP Agricultural Contract Management solution, when a commodities shipment arrives, its contents are weighed and analyzed, and this data is entered as part of the Load Data Capture procedure. Due to Brazilian legal requirements, the quantity in the goods receipt document must match the nota fiscal invoice document quantity instead of original NET scale quantity. For goods receipts from vendors with the *natural person* legal nature, because no nota fiscal is provided, the system calculates the quantity for goods receipts from natural persons based on the weight and grade data from the LDC and displays this quantity - the Logistics Adjusted Quantity (LA Qty, LAQ) - on the LDC *Brazil* tab.

- LAQ calculation is supported for both planned and unplanned scenarios.
- Because vendors who are not natural persons provide notas fiscais, the LAQ calculation does not apply for goods receipts from companies.
- For goods receipts from natural persons, you do not need to supply a nota fiscal.
- Specific details apply to goods receipt with LAQ for Future Delivery [page 255] and Triangular Operation [page 257].

Activities

For goods receipts from natural persons, maintain the relevant details on the *Weights Details* and *Analysis Details* tabs. The system automatically calculates the Logistics Adjusted Quantity, which appears in the Brazil tab. The LAQ is calculated based on several external factors that affect the goods - like heat, moisture, foreign materials, and so on.

The external factors are set up in DPQS. During LDC, the weights and grades needs to match with settings from trading contract into DPQS in order to proceed to final application when the LAQ is calculated. In the event of a mismatch, the hierarchy is checked to determine the application document status.

14.1.4 Brazil Workcenter

The Brazilian Workcenter is the central point from where users can use the Application and Settlement True-Up and Triangular/Future Delivery Monitor features.

For more information on each of these features, follow the links given below:

14.1.4.1 Application and Settlement True-Up

Use

When ordering goods from a vendor, you may sometimes experience a difference in the volume you order and the volume that actually arrives. When this happens, you can use *Application True-Up* to generate a return nota fiscal and goods movement which adjusts the stock volumes in the system when what was received is less than what was stated on the incoming nota fiscal. On the other hand, you can input a complimentary nota fiscal reference when what was received is greater than the incoming nota fiscal quantities.

Similarly, you may also encounter differences in amounts. In Brazil, when the nota fiscal amount is greater than the settlement amount, you can use *Settlement True-Up* to create a nota fiscal de retorno. Nota fiscal de retorno is a document that states that you have paid more than you were supposed to, and now have credit with your vendor. When the nota fiscal amount is less than the settlement amount, Settlement True-Up sets the status of the settlement document to *Waiting for Complementary NF*. This indicates that you are waiting for a nota fiscal complementar (an additional nota fiscal) from your vendor and you can pay at a later time.

Integration

The *Application and Settlement True-Up* component is integrated with the *Contract Application* and *Contract Settlement* components.

The *Contract Application* component receives the nota fiscal volume and calculates the logistics adjusted quantity (LAQ) based on the net volume captured by the *Load Data Capture* (LDC) component. After discount premium quality schedule (DPQS) adjustments, the final LAQ quantity is applied to the trading contract. The *Contract Application* component sends the nota fiscal volume and the LAQ volume to the *Application and Settlement True-Up* component to process the volume difference.

The *Contract Settlement* component receives the total nota fiscal amount and calculates the final settlement price. The *Contract Settlement* component also calculates the material net price based on the total nota fiscal amount captured by the LDC component. The material price is the commodity price without taxes. The *Contract Settlement* component sends the total nota fiscal amount and the settlement price to the *Application and Settlement True-Up* to process the amount difference.

As a part of ACM-CM integration which is realized as of *SAP Agricultural Contract Management 2.0*, an integration of risk exposure function with the Brazil-specific Application True-Up scenario has been enabled. With this integration, returning or receiving quantities to the vendor, the exposures for stock and stock correction are updated when the Application True-Up scenario is executed. For more information, see Integration with IS-OIL and Commodity Management [page 63].

Features

You use *Application and Settlement True-Up* to do the following:

- Search for application and settlement documents
- Process an application document for volume adjustments
- Process a settlement document for amount adjustments
- Reverse an application or settlement true-up document
- Reprocess a reversed application or settlement true-up document
- Link a manually created complimentary nota fiscal to an application or settlement true-up document
- Directly set application and settlement documents to *Complete*

You can also use the *Application and Settlement True-Up* to do the following:

- View the follow-on document list from an application or settlement true-up document
- View application document details
- View application true-up reference document details
- View reversed application true-up reference document details
- View settlement unit document details
- View settlement true-up reference document details
- View reversed settlement true-up reference document details

Example

As a customer, you have ordered goods from your vendor. The vendor issues the goods to you and creates a nota fiscal, which contains the volume of the goods and the amount the goods cost. The nota fiscal is dispatched to you along with the stock.

When the goods arrive, the nota fiscal volume, amount, and identification (ID) are registered in the LDC component. The goods are weighed by informing gross and tare weight. The net weight is the commodity-calculated weight from the gross weight minus the tare weight.

An application document is generated. You use this document to process the net weight and apply adjustments based on the quality characteristics captured versus the contracted characteristics. The result of the adjustments is the LAQ weight, which is applied to the trading contract.

If there is a difference between the vendor-issued details printed in the nota fiscal, and the details applied to the contract (the goods you receive), then *Application True-Up* processes the volume differences by generating subsequent adjustment documents.

The *Contract Settlement* component calculates the final price based on the application LAQ weight. The final price may be different from the nota fiscal amount contained in the *LDC* component. *Settlement True-Up* processes the amount differences by generating subsequent adjustment documents.

14.1.4.2 Processing Application and Settlement True-Up Documents

Use

Application True-Up is used to do quantity adjustments. Adjustments are needed when the nota fiscal volume and the volume applied to the trading contract do not match. The nota fiscal volume can be higher or lower than the applied volume. When the applied volume is higher than the nota fiscal volume the system sets the application true-up status to *Waiting for Complementary NF* which means that the corresponding complementary nota fiscal documents (purchase order, inbound delivery document, goods receipt, and incoming invoice) must be created. When the applied volume is lower than the nota fiscal volume, the system generates return nota fiscal and a goods movement decreasing the total material stock available.

You can also directly set application and settlement true-up documents to *Completed* if the adjustment has already been manually created. This is only possible for the following statuses:

- *Ready*
- *Failed*
- *Waiting Complementary NF*

Prerequisites

- The settlement has been settled and the incoming nota fiscal has been posted.
- The application or settlement true-up document has the status *Ready*.

Procedure

Processing an Application True-Up Document

1. On the *SAP Easy Access* screen, choose ▐▶ *Brazil* ▶ *Brazil Workcenter.* ▐
2. Select *Application True-Up* and choose ⊕.
3. Search for the application document you want to process.
4. Select the application document and choose ⬤. This will put the document in *Waiting Complimentary NF* status in case the applied volume is greater than the nota fiscal volume. In case the applied volume is less than the nota fiscal volume, a return nota fiscal is generated.
5. If a return nota fiscal is generated, it has to be posted to create the goods movement. For this, select the line with *Invoice On Hold* status.
   1. Choose ⬚ button.
   2. Double-click the *Return nota fiscal* line and post the document.
6. If the application true-up document is generated in *Waiting Complimentary NF* status, you can link the manually generated incoming invoice.
   1. Select the line with *Waiting Complimentary NF* status.

2. Click ⬚ button.

3. Input the manually created incoming invoice number and fiscal year, and click on ✔.

Processing a Settlement True-Up Document

1. On the *SAP Easy Access* screen, choose ❙▶ *Brazil* ❭ *Brazil Workcenter.* ❭

2. Select *Settlement True-Up* and choose 🕑.

3. Search for the settlement document you want to process. Settlement True-Up will only have *Ready* status after processing the corresponding Application True-Up.

4. Select the settlement true-up document and choose 🔴. This processes the settlement adjustments. If the chosen document is at *Reversed* status, it will be set back to *Waiting Application True Up* if the corresponding application true-up document is not at *Completed* status. Alternatively, it will be set back to *Ready* status, if the corresponding application true-up is set to *Completed* status.

5. The settlement true-up adjustment is generated on hold. To be able to post the generated document you will have to:

    1. Select the line with *Invoice On Hold* status.

    2. Choose 🗐 button.

    3. Double-click the adjustment document and post.

Setting an Application True-Up Document to Completed

1. On the *SAP Easy Access* screen, choose ❙▶ *Brazil* ❭ *Brazil Workcenter.* ❭

2. Select *Application True-Up* and choose 🕑.

3. Search for the application true-up document you want to process.

4. Select the application true-up document, choose 🖋. This will set the status of all selected application true-up to *Completed*.

Setting a Settlement True-Up Document to Completed

1. On the *SAP Easy Access* screen, choose ❙▶ *Brazil* ❭ *Brazil Workcenter* ❭.

2. Select *Settlement True-Up* and choose 🕑.

3. Search for the settlement document you want to process.

4. Select the settlement true-up document, choose *Set as Completed*. This will set the status of all selected settlement true-up to *Completed*.

Processing an Application True-Up Document for Complimentary NF in Future Delivery

1. On the *SAP Easy Access* screen, choose ❙▶ *Brazil* ❭ *Brazil Workcenter.* ❭

2. Select *Application True-Up* and choose 🕑.

3. Search for the application document you want to process.

4. Select the application document and choose 🔴. This will put the document in *Waiting Complimentary NF* status in case the applied volume is greater than nota fiscal volume.

5. If the application true-up document is generated in *Waiting Complimentary NF* status, you can link the manually generated incoming invoice.

    1. Select the line with *Waiting Complimentary NF* status.

    2. Click ⬚ button.

    3. Input the manually created incoming invoice number and fiscal year, and click ✔.

6. If the application true-up document is generated in *Waiting Complimentary NF* status, you can use the automatic option for linking complementary NF.
   1. The screen for providing the delivery note for quantity left in the existing future invoice and the new complimentary NF for excess quantity will appear.
   2. After receiving delivery note and complimentary NF, the system generates one goods receipt (GR) with a reference delivery note and the second one for additional quantity.

> ⁘ Example
>
> When the respective quantities are as follows, in case of linking the automatic complimentary, 2 GRs, one of 10 TO with the movement type 801 (*GR Adv. Inv. + Tax*) and the other of 20 TO with the movement type 101 (*GR goods receipt*) along with an invoice for 20 TO, will be created.
>
> - Invoice Quantity: 100 TO
> - Applied Quantity: 120 TO
> - Nota Fiscal Quantity: 90 TO

14.1.4.3 Reversing Application and Settlement True-Ups

Use

You can undo adjustments made to an application or settlement document by using the reversal process. The application reversal process, in terms of goods movement, reverses the exact amount as was created during the application true-up process, while the settlement reversal process cancels the settlement true-up document during settlement true-up processing.

Procedure

Reversing an Application True-Up

1. On the *SAP Easy Access* screen, choose ❙▶ *Brazil* ▶ *Brazil Workcenter* ❙.
2. Select *Application True-Up* and choose 🕓.
3. Search for the application document for which you want to reverse the true-up.
4. Select the application true-up document and choose the *Reverse True-Up* button. This cancels the incoming invoice and goods movement adjustment that was created during the application true-up process.

Reversing a Settlement True-Up

1. On the *SAP Easy Access* screen, choose ❙▶ *Brazil* ▶ *Brazil Workcenter* ❙.
2. Select *Settlement True-Up* and choose 🕓.
3. Search for the settlement document for which you want to reverse the true-up.
4. Select the settlement true-up document and choose the *Reverse True-Up* button. This cancels the settlement true-up document that was created during settlement true-up processing.

Note

The only application or settlement document that cannot be reversed is one that has the status *Reversed*. If needed you can reprocess and reverse a true-up document again.

If you reverse an application or settlement true-up document that has not been processed, the status is updated to *Reversed*, but no follow-on documents are generated.

14.1.5 Contract Settlement

Use

Contract settlements processing in Brazil is slightly different from standard settlement processing in core SAP Agricultural Contract Management mainly due to incoming nota fiscal (NF) document in Purchase scenarios. Nota fiscal is a paper invoice sent by the vendor, which needs to be settled. In Brazil, it is mandatory to have this goods related information in fiscal books, even if there are scale differences which do not match the NF data and scale data. Thus, it is mandatory that the settlement process generates a nota fiscal either with information which arrived at the plant, detached on the NF document (for company scenario) or with the information gathered from scale during the unload event (for natural person scenario). In company scenario, the settlement net amount and the vendor invoice amount might be different in most of the cases, so the *Application and Settlement True-Up* functionality might process them. After you approve a settlement group, the system creates a nota fiscal using standard MM process. The main data to generate an incoming NF is already available from previous documents, such as Load Data Capture, contract application, settlement document, material and vendor master.

Features

This section explains the following procedures:

14.1.5.1 Cancelling Nota Fiscal

Use

You use this procedure to cancel nota fiscal. This scenario takes place when the commodities have not left the plant. Currently the settlement reversal generates a credit memo, and subsequently a Nota Fiscal must be generated to cancel the original NF in this scenario. In the Brazil scenario, you must first reverse a settlement document to cancel the nota fiscal.

Procedure

In the *Settlement Workcenter*, complete the following steps:

1. On the *SAP Easy Access* screen, choose ▶ *Agricultural Contract Management* ❯ *Contract Settlement* ❯ *Settlement Workcenter* ◀ .
2. Choose *Settlement Reversal*.
3. Enter the required details and choose ⊕.
4. In the *Settlement Units* group box, choose the document.
5. Choose ⬀.
   In the *Reversal Settlement Groups* group box, a new line item containing simulated the settlement groups appear.
6. In the *Settlement Group* group box, choose the document.
7. Choose 🛑.
   The selected groups are generated and a new settlement group ID and settlement unit ID is created.

In the *Settlement Approval Queue*, complete the following steps:

1. On the *SAP Easy Access* screen, choose ▶ *Agricultural Contract Management* ❯ *Contract Settlement* ❯ *Settlement Approval Queue* ◀ .
2. Choose *Settlement Approval Queue*.
3. Enter the required details and choose ⊕.
4. In the *Settlement Group* group box, choose the settlement group line item.
5. Choose 🖋, then choose *Approve*.
   For incoming scenarios, a credit memo is created in the *Brazil Settlement Hold Invoice* status. You can then cancel the nota fiscal document in the `MIRO` transaction.

> **i Note**
>
> When the nota fiscal leaves the company, it cannot be canceled anymore. Therefore, the settlement reversal for this scenario is not allowed. Instead, the process is treated as a return nota fiscal, even if no physical transfer is actually made.

14.1.5.2 Outgoing Nota Fiscal

Use

In the sales scenario, a company is selling commodity items to a customer and needs to generate an outgoing nota fiscal document to. This document is attached to the load, which will depart from the plant. In sales, you use the billing due list in the transaction `VF04` to create a billing document. Through this transaction all pending billing documents (order-related and delivery-related) for billing are displayed for processing. They can be processed either individually or collectively - if the determined criteria match. In the sales flow, after settlement execution, an ABD is generated (Expenses Settlement). In this way, when you perform billing generation in the transaction `VF04`. The invoice and consequently the outgoing nota fiscal document is created with the correct

pricing calculation. Alternatively, you can use billing creation transaction `VF01` to process delivery documents individually and generate outgoing Nota Fiscal documents.

Procedure

1. On the *SAP Easy Access* screen, choose ▶ *Agricultural Contract Management* ▶ *Contract Settlement* ▶ *Settlement Approval Queue* ▶.
2. Choose *Settlement Approval Queue*.
3. Enter the required details and choose 🕓.
4. In the *Settlement Group* group box, choose the settlement group line item.
5. Choose 🔧 , then choose *Approve*.

> **i Note**
>
> For Brazil outgoing scenario, if you chose *Approve*, the settlement document is ready for invoice. You then create a billing document in transaction `VF04`. When the billing document is posted, an outgoing nota fiscal document is created automatically.

More Information

14.1.5.3 Incoming Nota Fiscal

Use

In the third party purchase scenario, there are two main purchase scenarios that can occur, namely buying from a company and buying from a natural person. In the first case, a load from a company will arrive at the plant with an incoming nota fiscal (NF) document. This document contains details about load price, weight, NF ID and so on. In Brazil, it is mandatory to have this information in fiscal books, even if there are scale differences between NF data and scale data. In the second scenario, a natural person arrives at the plant usually without an NF document, or the NF document is not considered by the receiving company, or the NF ID is only used as a reference document. In such a scenario, the weight considered is the one achieved by the scale. In the second case, there is no legal NF document arriving in the plant since there is no company involved. Nevertheless there is an invoice document, which is entered in the system and processed by the settlement.

Features

The following fields are mandatory for incoming nota fiscal generation:

- Nota Fiscal ID (reference ID)
- Quantity (gross amount/adjusted)
- Price
- Nota Fiscal Type
- Taxes Amount and Tax Code
- Counterparty Data
- CFOP Determination
- Tax Jurisdiction Code

Activities

1. On the *SAP Easy Access* screen, choose ▷ *Agricultural Contract Management* ❯ *Contract Settlement* ❯ *Settlement Approval Queue* ❯.
2. Choose *Settlement Approval Queue*.
3. Enter the required details and 🕒.
4. In the *Settlement Group* group box, choose the settlement group line item.
5. Choose 📋, then choose *Approve*.

> **i Note**
>
> For Brazil incoming scenario, if you chose *Approve*, the document goes into *Brazil Settlement Hold Invoice* status. In such a case, an MM invoice document is created in the background in a *Brazil Settlement Hold Invoice* status to allow nota fiscal input. You can then post the nota fiscal document in the MIRO transaction. The settlement then goes to invoiced state.

More Information

- Invoicing Settlements [page 200]
- Revenue Recognition and Purchase Realization [page 203]

14.1.5.4 Returning Nota Fiscal

Use

This scenario occurs when a load that was bought or sold is to be returned to its vendor or customer, correspondingly. In such scenarios SAP Agricultural Contract Management solution provides specific handling

with Settlement Returns functionality, however, for Brazil, there is a return Nota Fiscal you must generate during Credit Memo creation in this process.

Procedure

1. On the *SAP Easy Access* screen, choose ▶ *Agricultural Contract Management* 〉 *Contract Settlement* 〉 *Settlement Workcenter* ▶.
2. Choose *Settlement Returns*.
3. Enter the required details and choose ⊕.
4. In the *Application* group box, choose the document.
5. Choose 📝.
   In the *Settlement Group* group box, a simulated returns settlement group is created.
6. Choose 🔴.
   A credit memo document is created in the *Brazil Settlement Hold Invoice* status, and thus you can return the NF document in the MIRO transaction. The settlement document then goes to the returns settlement state.

> **i Note**
>
> You then go to approve settlement and continue the settlement process. For more information, see Approving or Rejecting Settlements [page 184]. Once you have created the invoice for the returns settlement document you must recognize revenue.

More Information

- Invoicing Settlements [page 200]
- Revenue Recognition and Purchase Realization [page 203]

14.1.5.5 Viewing Brazil Data at Group and Unit Level

Use

You can view the settlement group and settlement unit details of Brazil in the settlement workcenter. You can further view and compare the Brazil data in the Load Data Capture workcenter.

Procedure

1. On the *SAP Easy Access* screen, choose ▶ *Agricultural Contract Management* ❯ *Contract Settlement* ❯ *Settlement Workcenter* ❯.
2. Choose *Change Settlement*.
3. In the *Find By* field, enter *Settlement Group*.
4. In the *Group Data* group box, enter a settlement group number and choose 🔍.
   The settlement group details appear.
5. Choose the settlement group line item to view the settlement unit details.
6. To view the Brazil details, choose 🔲 and then choose the *Brazil* tab page. You can do this for both the settlement group and the settlement unit.

> **i** Note
>
> In the same way, you can also go to the Load Data Capture workcenter and check the Brazil details. On the *SAP Easy Access* screen, choose ▶ *Agricultural Contract Management* ❯ *Load Data Capture* ❯ *Maintain LDC* ❯.

14.1.6 Special Operations

You can perform the following special operations in the Brazil Country-Specific area:

- Commingled Stock [page 249]
- Future Delivery [page 255]
- Triangular Operation [page 257]

14.1.6.1 Commingled Stock

This section describs the following topics:

- Commingled Stock Features [page 249]
- Commingled Stock Processes [page 250]
- Creating LDC Objects for Commingled Stock [page 252]
- Processing Commingled Stocks in Manual Application Workcenter [page 253]

14.1.6.1.1 Commingled Stock Features

Use

You use this function to handle commingled stock for Brazil.

When the firm accepts a commodity from a vendor (owner) for storage at the firm's location, but does not purchase it, the firm must keep a record of such commodity.

This kind of obligated quantity is called 'commingled stock', as it is stored in the same location as the firm's own inventory and its quantity as well as grade and quality characteristics may become indistinguishable from other inventory.

The firm must ensure that a commingled load that is stored on its site is available for retrieval by its owner at the same or better quality as when it was delivered to the firm's site.

There may be a fee associated with the storage of the stock and the quantity may or may not be purchased by the firm from the owner.

Using this function, you can keep track of movements associated with commingled loads and manage their contracts.

Features

The following are the features that are specific for Brazil commingled stock:

- Create and search Load Data Capture (LDC) objects for Brazil commingled stock using the application instruction **81 (Brazil Commingled)** in Load Data Capture Workcenter
- Display the country-specific *Brazil* tab in LDC
- Display *Commingled* for the *Special Operation* field on the *Brazil* tab
- Incorporate the Brazil country-specific Nota Fiscal concept along with the vendor legal nature (*Company* or *Natural Person*) on the *Brazil* tab
- Enable user to set the goods receipt creation mode (*Automatic* or *Manual*) in Customizing
- Purchase the commingled stock from storage in either single step or two steps by using the *Commingled* node in Manual Application Workcenter (MAW)
- Process multiple Brazil commingled loads together by combining the corresponding items using the *Group Application* feature in MAW
- Load out the stock from storage if the vendor (owner) decides not to sell the commodity

14.1.6.1.2 Commingled Stock Processes

Use

The commingled load information is captured in the same manner as other load data. This includes the capture of *Weights Details*, *Analysis Details* and so on.

In addition, the load must be identified as commingled stock for Brazil by entering the application instruction **81 (Brazil Commingled)**. Once it is identified as such, a storage program can be assigned during the data capture.

Subsequently, the load quantity is designated with a warehouse for storage, so that a goods receipt can be issued to the owner.

Prerequisites

The following Customizing settings are required to use the Brazil commingled stock features:

- You have maintained the goods receipt creation mode in Customizing for ▌▶ *Logistics - General* ❯ *Global Trade Management* ❯ *Agricultural Contract Management* ❯ *Country-Specific Settings* ❯ *Brazil* ❯ *Basic Setting* ❯ *Special Operation* ❯ *LDC Automatic/Manual Goods Receipt (Using OF)* ❯ *Define Goods Receipt Creation Mode* ▌.

- You have maintained the goods receipt (GR) search sequence in Customizing for ▌▶ *Logistics - General* ❯ *Global Trade Management* ❯ *Agricultural Contract Management* ❯ *Country-Specific Settings* ❯ *Brazil* ❯ *Basic Setting* ❯ *Special Operation* ❯ *LDC Automatic/Manual Goods Receipt (Using OF)* ❯ *Define Search Sequence for Automatic/Manual GR Creation* ▌.

> **i Note**
>
> This Customizing setting is required only if you want to use the automatic GR creation.

- You have maintained the movement types in Customizing for ▌▶ *Logistics - General* ❯ *Global Trade Management* ❯ *Agricultural Contract Management* ❯ *Country-Specific Settings* ❯ *Brazil* ❯ *Basic Setting* ❯ *Special Operation* ❯ *Maintain Movement Types* ▌.

- You have maintained the storage locations in Customizing for ▌▶ *Logistics - General* ❯ *Global Trade Management* ❯ *Agricultural Contract Management* ❯ *Country-Specific Settings* ❯ *Brazil* ❯ *Basic Setting* ❯ *Special Operation* ❯ *Maintain Storage Location for Commingled Stock* ▌.

Process

The processes for Brazil commingled stock scenario take place in Load Data Capture (LDC) Workcenter and Manual Application Workcenter (MAW) as follows:

Load Data Capture Workcenter

You use the Load Data Capture (LDC) Workcenter to perform the following:

- Trigger the Brazil commingled stock scenario by creating an LDC object
  For detailed procedure, see Creating LDC Objects for Commingled Stock [page 252].

Manual Application Workcenter

You use the Manual Application Workcenter (MAW) to perform the following:

- Purchase the commingled stock from the storage that triggers the application to the contract which is entered as *Ref. Contract* (reference contract) in LDC
- Reverse the purchase of commingled stock from the storage
- Create the storage load out when the load is returned to its owner without purchasing

For step-by-step procedures, see Processing Commingled Stocks in Manual Application Workcenter [page 253].

14.1.6.1.3 Creating LDC Objects for Commingled Stock

Use

You use this procedure to create Load Data Capture (LDC) objects for Brazil commingled loads in the LDC Workcenter.

Prerequisites

- You are authorized to work in the Load Data Capture (LDC).

Procedure

The creation of LDC objects for Brazil commingled stock takes place as follows using the capabilities that are provided by Load Data Capture Workcenter:

1. Captures the *Application Instruction* `81 (Brazil Commingled)` .
2. Captures the *LDC General Information*.
3. Captures the *Ref. Contract* (reference contract) on the *Brazil* tab.
4. Optionally, captures the purchasing document on the *Additional Details* subscreen.
   If this step is skipped, the corresponding purchase order is generated by Orchestration Framework when the LDC object is created.
5. Generates a goods receipt (GR).
   If the *Vendor Legal Nature* is `Company`, the GR creation can be either manual or automatic depending on the Customizing setting, while it can only be manual if the *Vendor Legal Nature* is `Natural Person`.

Result

You have created an LDC object for Brazil commingled stock.

A goods receipt with corresponding movement type is created either automatically or manually based on the relevant Customizing settings.

You can check all documents that have been created in background using the *Recovery Report* (transaction code `/ACCGO/OE_RECOVERY`) in Orchestration Framework.

More Information

For more information about the Brazil country-specific features with LDC, see Load Data Capture Workcenter [page 235].

14.1.6.1.4 Processing Commingled Stocks in Manual Application Workcenter

Use

Under this topic, a set of step-by-step procedures is provided. You use these procedures to process Brazil commingled stocks in the Manual Application Workcenter (MAW).

Prerequisites

- You are authorized to work in the Manual Application Workcenter.
- You have maintained the required master data settings in the Business Rule Framework plus.

Procedure

Under this section, the following step-by-step procedures are provided. Where the procedures are no different from the ones for the *core Commingled Stock* for *SAP Agricultural Contract Management*, the link to the corresponding procedure topic is provided, while the Brazil country-specific procedures are explained in detail.

Application Document Search

For step-by-step procedure, see Displaying Application Documents [page 143].

Contract Application

For step-by-step procedure, see Assignment of Application Documents to Contract [page 144].

Purchase from Storage

The purchase of Brazil commingled stock from storage can be executed in either single step or two steps as follows:

- **Single Step**
    1. Select an item in the *Application Document Details* area in MAW and press the *Purchase* button.
    The *Commingled* popup appears.
    2. Enter **both purchase volume data and Nota Fiscal data** in the popup.
    The following fields are displayed:
        - *Purchase Volume*
        Change the volume as required.
        - *Ref. Contract*
        - *Vendor*
        - *Enter Nota Fiscal ID* (checkbox)

        > **i Note**
        >
        > Mark this checkbox and choose ✔ to make the *Nota Fiscal Data* fields editable.

- *Natural Person* (checkbox)
  This checkbox is inactive if the relevant vendor legal nature for the selected item is company.
- *Nota Fiscal Data*
  - *Nota Fiscal Invoice No*
  - *NF Weight*
  - *NF Total*

3. Choose ✔.

   The purchase is completed with the status *Finally Applied*.

   > **i Note**
   >
   > For the case of multiple items, symbolic return goods movements are triggered and a purchase order, an inbound delivery and a goods receipt are created **in background** for the summarized quantity of the multiple items that are included in the application group. Subsequently settlement takes place based on the application group ID level and the included items are processed together.

   > **⁛ Example**
   >
   > Suppose the following Brazil commingled loads (items) are included in an application group:
   >
   > - Item 1 – 200 KG
   > - Item 2 – 300 KG
   > - Item 3 – 500 KG
   >
   > The following are created for the application group with the summarized quantity of the above items included:
   >
   > - Purchase Order – 1000 KG
   > - Inbound Delivery – 1000 KG
   > - Goods Receipt – 1000 KG

- **Two Steps**
  1. Select an item and press the *Purchase* button.
     The *Commingled* popup appears.
  2. Enter **only purchase volume data** in the popup.

  3. Choose ✔.

     The first step of purchase is completed with the status *BR: Waiting for Invoice NF*.

     > **i Note**
     >
     > For the case of multiple items, symbolic return goods movements are triggered and a purchase order is created **in background** for the summarized quantity of the multiple items that are included in the application group.

  4. Select the same item again at a later point in time and press the *Enter Invoice NF* button.
     The *Commingled* popup appears.
  5. Enter **Nota Fiscal data** in the popup.

  6. Choose ✔.

     The second step of purchase is completed with the status *Finally Applied*.

> **i Note**
>
> For the case of multiple items, an inbound delivery and a goods receipt are created **in background** for the summarized quantity of the multiple items that are included in the application group. Subsequently settlement takes place based on the application group ID level and the included items are processed together.

Reverse of Purchase from Storage

For step-by-step procedure, see Reversing Assignment of Application Document to Contract [page 146].

Load Out from Storage

For step-by-step procedure, see Creating Storage Load Out [page 156].

More Information

For more information, see Commingled Loads [page 140] section and the associated individual topics that describe the *core Commingled Stock* scenario for *SAP Agricultural Contract Management*.

14.1.6.2 Future Delivery

Use

This function is related to the purchase side and involves two parts, namely the customer and the vendor. In this function, the invoice is sent first and the goods are delivered at a later date.

The customer buys commodities from the vendor. The vendor receives the request and sends an Invoice Nota Fiscal in advance to the customer. If there is more than one delivery, when the vendor sends the commodities, each delivery has a Delivery Nota Fiscal.

The customer receives one Invoice Nota Fiscal and one or more Delivery Notas Fiscais from the vendor, where the total quantities from all the Delivery Notas Fiscais must be equal to the total amount in the Invoice Nota Fiscal.

Prerequisites

- On the *Invoice* tab on the *Purchase Order* screen, you have selected only Invoice Receipt to set up Future Delivery. This is a standard process.
- You have posted an invoice in advance in the MIRO transaction. This is a standard process.
- You have created an LDC. For more information, see Load Data Capture (LDC) Object [page 99].
- You have configured the relevant Customizing settings under ▌▶ *SAP Agricultural Contract Management* ❯ *Country-Specific Settings* ❯ *Brazil* ❯ *Basic Setting* ❯ *Special Operation* ❯ *LDC Automatic/Manual Goods Receipt (Using OF)* ❯ *Define Goods Receipt Creation Mode* ▐ . You use this Customizing activity if you want

Goods Receipts (GR) to be created automatically. If you do not customize GR as automatic, by default the process will take place manually.

- You have configured the relevant Customizing settings under ▐▶ *SAP Agricultural Contract Management* ❯ *Country-Specific Settings* ❯ *Brazil* ❯ *Basic Setting* ❯ *Special Operation* ❯ *LDC Automatic/Manual Goods Receipt (Using OF)* ❯ *Define Search Sequence for Automatic/Manual GR Creation* ◢. You must use this Customizing activity, if Goods Receipt has been customized in the previous Customizing activity.

- You have configured the relevant Customizing settings under ▐▶ *SAP Agricultural Contract Management* ❯ *Country-Specific Settings* ❯ *Brazil* ❯ *Basic Setting* ❯ *Special Operation* ❯ *Maintain Movement Types* ◢.

Features

In Load Data Capture Workcenter

For Company

- In the *Brazil* tab, you must fill in the *Delivery Nota Fiscal* group box manually.
- The system already recognizes this nota fiscal as a *Company*.
- If *Goods Receipt* (GR) is customized as automatic, when you save and release the LDC, the GR gets posted automatically. In this case, the *Goods Receipt* pushbutton is disabled on the *Brazil* tab.
- If the *Goods Receipt* is customized as manual, after you save and release the LDC, you must return to the LDC, choose *Edit*, and then click the *Goods Receipt* pushbutton to post the GR.

For Natural Person

- Enter the necessary details in the *Weights Details* tab and *Analysis Details* tab to calculate the Logistics Adjusted Quantity (LA Qty) automatically, which appears in the *Brazil* tab. The LA Qty is calculated based on several external factors that affect the goods, like heat, moisture, foreign materials, and so on.
- The system already recognizes this nota fiscal as *Natural Person*.
- You do not select the *Delivery Nota Fiscal Receipt*, as a delivery note is not mandatory for a natural person.
- For *Natural Person*, *Goods Receipt* is always manual. It cannot be customized as automatic.
- After you save and release the LDC, you must return to the LDC, choose *Edit*, and then click the *Goods Receipt* pushbutton to post the GR.
- When you return to the LDC screen from the MIGO transaction, all the details in the *Delivery Nota Fiscal* group box will be filled in automatically. These details are picked up from the MIGO transaction itself.

For Natural Person Compare to Company

- On the *Brazil* tab, the system initially recognizes this nota fiscal as *Natural Person*.
- You then select *Delivery Nota Fiscal Receipt* and the *Vendor Legal Nature* changes to *Natural person compared to company*.
- In this case, the system does not use the LA Qty for the Goods Receipt calculation. Therefore, the LA Qty becomes zero after the user selects the *Delivery Nota Fiscal Receipt*.
- You must fill in the *Delivery Nota Fiscal* group box details manually.
- If *Goods Receipt* is customized as automatic, when you save and release the LDC, the GR gets posted automatically. In this case, the *Goods Receipt* pushbutton is disabled in the *Brazil* tab.
- If the *Goods Receipt* is Customized as manual, after you save and release the LDC, you must return to the LDC, choose *Edit*, and then click the *Goods Receipt* pushbutton to post the GR.

In Contract Settlement

- Contract Settlement creates a settlement group if all deliveries have been in the system and the balance between Nota Fiscal Invoice and Delivery Note is zero, or if the process was finalized in the *Brazil Workcenter*. You can use the NF ID to create a settlement.
- For more information see, Creating Settlements [page 179].

In Brazil Workcenter

In the *Brazil Workcenter*, go to the *Triangular/Future Delivery Monitor* and check the balance of quantities between Nota Fiscal Invoice and Delivery Note. You can then select *Final*, to indicate whether this delivery is final or not. Selecting *Final* allows the system to create a settlement and also to lock the Nota Fiscal ID so that no new LDCs are created.

> **i Note**
>
> As a part of ACM-CM integration which is realized as of *SAP Agricultural Contract Management 2.0*, an integration of risk exposure function with the Brazil-specific Future Delivery scenario has been enabled. With this integration, the relevant exposures (stock, application and contract) are updated when the Future Delivery scenario is executed. For more information, see Integration with SAP Commodity Management [page 63] and Exposure Management.

14.1.6.3 Triangular Operation

Use

This function is related to the purchase side and involves three parties, namely customer, vendor, and goods supplier.

The customer orders commodities from the vendor and this vendor in turn asks a goods supplier to deliver this commodity to the customer. The vendor sends an Invoice Nota Fiscal to the customer.

The goods supplier who delivers the commodities to the customer sends one or more Delivery Notes.

Prerequisites

- In the *Invoice* tab on the *Purchase Order* screen, you have selected only *Invoice Receipt* to set up Triangular Operation. This is a standard process.
- You have posted the Invoice Nota Fiscal in advance in the MIRO transaction, manually. This is a standard process.
- You have created a Load Data Capture (LDC). For more information, see Load Data Capture (LDC) Object [page 99]
- You have configured the relevant Customizing settings under ▐▶ *SAP Agricultural Contract Management* ▶ *Country-Specific Settings* ▶ *Brazil* ▶ *Basic Setting* ▶ *Special Operation* ▶ *Definition for Triangular Operation* ◀▌
- You have configured the relevant Customizing settings under ▐▶ *SAP Agricultural Contract Management* ▶ *Country-Specific Settings* ▶ *Brazil* ▶ *Basic Setting* ▶ *Special Operation* ▶ *LDC Automatic/Manual Goods*

Receipt (Using OF) ❯ *Define Goods Receipt Creation Mode* ❯. You use this Customizing activity if you want Goods Receipt (GR) to be created automatically. If you do not Customize GR as automatic, by default the process will take place manually.

- You have configured the relevant Customizing settings under ❯ *SAP Agricultural Contract Management* ❯ *Country-Specific Settings* ❯ *Brazil* ❯ *Basic Setting* ❯ *Special Operation* ❯ *LDC Automatic/Manual Goods Receipt (Using OF)* ❯ *Define Search Sequence for Automatic/Manual GR Creation* ❯. You must use this Customizing activity, if Goods Receipt has been Customized in the previous Customizing activity.

- You have configured the relevant Customizing settings under ❯ *SAP Agricultural Contract Management* ❯ *Country-Specific Settings* ❯ *Brazil* ❯ *Basic Setting* ❯ *Special Operation* ❯ *Maintain Movement Types* ❯

Features

In LDC

The details of the Invoice Nota fiscal group box are related to the Vendor Legal Nature. The Invoice Nota Fiscal group box cannot be edited.

The details in the Invoice Nota Fiscal group box are already filled in. These details are picked up from the invoice document posted by the user. The system recognizes the special operation type from the Purchase Order.

The details of the Delivery Nota Fiscal group box and Natural Person group box is related to the Supplier Legal Nature. The Delivery Nota fiscal details must be filled in manually. The Natural Person group box is filled in with the Logistics Adjusted Quantity (LA Qty) only if the Supplier Legal Nature is Natural Person.

As there are three kinds of vendor/ supplier, namely Company, Natural Person, and Natural person compared to company- there can be 6 different combinations of vendor and supplier. The table below shows the various possible combinations:

Vendor	Supplier
Natural Person	Natural person compared to company
Natural Person	Company
Natural Person	Natural Person
Company	Natural person compared to company
Company	Company
Company	Natural Person

You select the Delivery Nota Fiscal Receipt if the Supplier Legal Nature is Company or Natural Person compare to company. You do not select the Delivery Nota Fiscal Receipt in case of Natural Person, as a delivery note is not mandatory for a Natural Person.

When Supplier Legal Nature is Natural Person, Goods Receipt is always manual. It cannot be Customized as automatic. For Company and for Natural person compared to company the Goods Receipt can be manual or automatic depending on Customizing.

In Contract Settlement

Contract Settlement creates a settlement group for many application documents, if all deliveries have been in the system and the balance between Nota Fiscal Invoice and Delivery Note is zero, or if the process was finalized in the Brazil Workcenter. You can use the NF ID to create a settlement.

As the user posted the invoice manually, contract settlement can avoid the creation of Invoice Nota Fiscal. The system identifies the posted invoice to fill in the fields related to Invoice Nota Fiscal and also includes the invoice document for the user to check the invoice data through document flow.

For more information see, Creating Settlements [page 179].

In Brazil Workcenter

Application/Settlement True-Up processes the volume and amount differences obtained during a load processing related to a Commodity Contract. These quantities and amounts differences occur due to discrepancies in the value entered in the Nota Fiscal document and the real quantities that arrive at the plant.

Go to the Triangular/Future Delivery Monitor and check the balance of quantities between Nota Fiscal Invoice and Delivery Note. You can then select Final, to indicate whether this delivery is final or not. Selecting Final allows to create settlement and also locks the Nota Fiscal ID so that no new LDCs can be created.

> **i Note**
>
> As a part of ACM-CM integration which is realized as of *SAP Agricultural Contract Management 2.0*, an integration of risk exposure function with the Brazil-specific Triangular Operation scenario has been enabled. With this integration, the relevant exposures (stock, application and contract) are updated when the Triangular Operation scenario is executed. For more information, see Integration with SAP Commodity Management [page 63] and Exposure Management.

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