

Functional Documentation - Working Capital

1.0 Overview

Working Capital Menu

Business Context and Application Overview

The Working Capital (WC) application falls under the Finance domain and leverages data sourced from SAP systems, including Receivables, Payables, and Inventories, originating from the SAP Financial (SAP FI) module, as well as its submodules AP (Accounts Payables), AR (Accounts Receivables), and GL (General Ledger).

It's a FI oriented solution, mainly based on SAP accounting documents widely enhanced in SAP BW (ex. cost object assignment of Vendor postings).

The aim of this application is to provide detailed information for Payables, Receivables and Inventory data for Industrial WC analysis and piloting, including reconciliation with our official reporting tool Business Financial and Consolidation (BFC).

This solution has been in WBP since 2015.

Application User Profile

For this Application the access is provided based on the BW menu "WCAP - Working Capital Solvay Group" and it's done via Service one.

Fill the form

<https://solvay-dwp.onbmc.com/dwp/app/#/itemprofile/622>

In SAP system select the " WBP - BW Business Warehouse"

In WBP - BW Business Warehouse : Select the Business Role select the " WCAP - Working Capital Solvay Group"

Target Users:

Finance and Controlling teams also Purchasing and Supply chain colleagues (more than 600 users).

VERSION	DATE	MODIFIED BY	DESCRIPTION
0.01	08.08.2023	Inês Vilares	Initial draft

2.0 Business Process

Application Type

Data Product Type

- Dashboard
- Report
- Advanced analytics
- AI
- Others

Technologies

- BW
- Tableau
- QlikSense
- Talend
- Dataiku
- Others

Data Sources

Note: list of all applications and various environment

- SAP PF1 (Production environment)
- SAP WP1
- SAP PI1
- BFC flat files
- BW (versions)
- iCare CRM
- CORE CRM
- Others

Business Process

Working capital is a financial metric that represents the difference between a company's current assets and its current liabilities. It reflects the company's ability to meet its short-term financial obligations and operational needs. Working capital is a critical measure for assessing a company's financial health and its ability to manage day-to-day operations.

Here's how working capital is calculated:

Working Capital = Current Assets - Current Liabilities

Current Assets: These are assets that are expected to be converted into cash or used up within one year or one operating cycle (whichever is longer). Common examples include cash, accounts receivable (money owed by customers), inventory, and short-term investments.

Current Liabilities: These are the company's short-term financial obligations that are expected to be settled within one year or one operating cycle. Examples include accounts payable (money owed to suppliers), short-term loans, and accrued expenses.

Accounts Receivables: These are amounts owed to a company by its customers for goods or services that have been delivered or provided but have not yet been paid for. Accounts receivable are typically short-term assets, and companies often have payment terms (e.g., net 30 days) specifying when the customer is expected to settle the outstanding amount.

Managing receivables is an important aspect of a company's financial management because it affects cash flow and liquidity. Companies need to strike a balance between offering customers credit terms to encourage sales and ensuring timely collection to maintain healthy cash flow.

To effectively manage receivables, businesses often employ credit policies and procedures, credit checks on customers, send invoices promptly, and may even use collection agencies or offer discounts for early payments. Receivables turnover ratios and aging reports are tools commonly used to assess the efficiency of receivables management and to identify potential issues with overdue accounts.

To see more detail about the business process in Solvay for Account Receivables please consult the following wiki page [Customer Credit & Trade Service Line Knowledge Base](#).

Accounts Payables: Refers to the amounts of money that a business owes to its suppliers or creditors for goods or services it has received but has not yet paid for. Accounts payables represent a company's short-term liabilities, as these amounts are typically expected to be settled within a relatively short period, often within 30 to 90 days.

Managing accounts payables effectively involves ensuring timely payments to suppliers while optimizing cash flow and taking advantage of any early payment discounts that may be available. It's an important aspect of a company's financial management and impacts its relationships with suppliers and creditors.

To see more detail about the business process in Solvay for Account Receivables please consult the following wiki page [Purchasing Service Line](#).

Inventory: Refers to the goods and materials that a business holds in stock and plans to sell to customers. Inventory is considered a current asset on a company's balance sheet because it is expected to be converted into cash or sold within a relatively short period, typically one year or one operating cycle (whichever is longer).

In Inventory data we can check the values for raw materials, WIP products, finish goods, among other fields which allows the users to perform analysis which allow them to have a efficient inventory management since this is essential for optimizing working capital and ensuring that a company has sufficient liquidity to meet its short-term obligations while supporting its sales and production operations. The specific approach to managing inventory will depend on the industry, market demand, and company strategy.

3.0 Application Feature Overview

For this application find below all the workbooks available:

1- For GBU Conso. View

Reports	Definition	Prompts	BW Workbook Query	Query Technical Name
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<p>WC GBU Solvay Group - BFC vs BW extract (Core Workbook)</p>	<p>In this report the users can compare the data from BW with the BFC data from FC pack and BFC Conso regarding Receivables, Payables and Inventories data for one specific period to be able to check and analyze the values and differences if exists.</p>	<p>Mandatory:</p> <ul style="list-style-type: none"> • Conso view; • Calendar Day; • Currency; • PRS Company Code; • PRS Comp. Mgt Zone; • WC Account Type; • BFC GBU. <p>Optional:</p> <ul style="list-style-type: none"> • Auth Scope on Company Code; • Company Code; • WC Account subtype; • 2 - BFC Grp of Activ.; • 3 - BFC Activity 1; • 3 - BFC Activity 2. 	<p>BW_WBK_WCAP_0010</p>	<p>BW_QRY_MVFIWC01_0006</p>
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<p>WC GBU Solvay Group - Inventory extract (Core Workbook)</p>	<p>It's possible to see detail information for Inventories such as material division, material group, PIF code, plant among others and analyze the Total Stock value, Total Stock Quantity and Unit price for different months.</p>	<p>Mandatory:</p> <ul style="list-style-type: none"> • Conso. view; • Calendar Day; • Currency; • PRS Company Code; • PRS Comp. Mgt Zone; • BFC GBU. <p>Optional:</p> <ul style="list-style-type: none"> • Auth Scope on Company Code; • Company Code; • Qty conv. unit; • WC Account subtype; • 2 - BFC Grp of Activ.; • 3 - BFC Activity 2. 	<p>BW_WBK_WCAP_0007</p>	<p>BW_QRY_MVFIWC01_0005</p>
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<p>WC GBU Solvay Group - Payables extract (Core Workbook)</p>	<p>It's possible to see detail information for Payables such as vendor number, PRS vendor number, name, among other fields that is possible to add to analyze the total balance for vendors and the values overdue and due depending on the calendar selection.</p>	<p>Mandatory:</p> <ul style="list-style-type: none"> • Conso. view; • Calendar Day; • Currency; • PRS Company Code; • PRS Comp. Mgt Zone; • BFC GBU. <p>Optional:</p> <ul style="list-style-type: none"> • Auth Scope on Company Code; • Company Code; • WC Account subtype; • 2 - BFC Grp of Activ.; • 3 - BFC Activity 2. 	<p>BW_WBK_W CAP_0008</p>	<p>BW_QRY_M VFIWC01_00 04</p>
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<p>WC GBU Solvay Group - Rec. Aged balance (Core Workbook)</p>	<p>The report allows the users to see the total balance of the accounts and the overdue values information by aging until >180 days.</p>	<p>Mandatory:</p> <ul style="list-style-type: none"> • Conso. view; • Calendar Day; • Currency; • PRS Company Code; • PRS Comp. Mgt Zone; • BFC GBU. <p>Optional:</p> <ul style="list-style-type: none"> • Auth Scope on Company Code; • Company Code; • Credit Control area; • WC Account subtype; • 2 - BFC Grp of Activ.; • 3 - BFC Activity 1. 	<p>BW_WBK_WCAP_0012</p>	<p>BW_QRY_MVFIWC01_0012</p>
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<p>WC GBU Solvay Group - Receivables extract (Core Workbook)</p>	<p>It's possible to see detail information for Receivables such as customer number, PRS customer number, name, among other fields to analyze the total balance for customers and the values overdue and due depending on the calendar selection.</p>	<p>Mandatory:</p> <ul style="list-style-type: none"> • Conso. view; • Calendar Day; • Currency; • PRS Company Code; • PRS Comp. Mgt Zone; • BFC GBU. <p>Optional:</p> <ul style="list-style-type: none"> • Auth Scope on Company Code; • Company Code; • WC Account subtype; • 2 - BFC Grp of Activ.; • 3 - BFC Activity 1. 	<p>BW_WBK_WCAP_0009</p>	<p>BW_QRY_MVFIWC01_0003</p>
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<p>WC GBU Solvay Group - Synthesis extract (Core Workbook)</p>	<p>In this report the users can check the total balance for Receivables, Payables and Inventories data for one specific period and also to check the amounts for Overdue and Due information by Company in the 1° sheet and by WC Sub Type in the 2° sheet.</p>	<p>Mandatory:</p> <ul style="list-style-type: none"> • Conso. view; • Calendar Day; • Currency; • PRS Company Code; • PRS Comp. Mgt Zone; • WC Account Type; • BFC GBU. <p>Optional:</p> <ul style="list-style-type: none"> • Auth Scope on Company Code; • Company Code; • WC Account subtype; • 2 - BFC Grp of Activ.; • 3 - BFC Activity 1; • 3 - BFC Activity 2. 	<p>BW_WBK_WCAP_0006</p>	<p>BW_QRY_MVFIWC01_0002</p>
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WC GBU Solvay Group (Core Workbook)	<p>This Workbook combine the several reports in the same place divided by the different sheets:</p> <ul style="list-style-type: none"> • Synthesis by Company (same info as WC GBU Solvay Group - Synthesis extract (Core Workbook)); • Synthesis by WC Sub Type (same info as WC GBU Solvay Group - Synthesis extract (Core Workbook)); • Inventory (same info as WC GBU Solvay Group - Inventory extract (Core Workbook)); • Receivables (same info as WC GBU Solvay Group - Receivables extract (Core Workbook)); • Payables (same info as WC GBU Solvay Group - Payables extract (Core Workbook)); • BW vs BFC WC GBU Solvay Group - BFC vs BW extract (Core Workbook). 	<p>Mandatory:</p> <ul style="list-style-type: none"> • Conso. view; • Calendar Day; • Currency; • PRS Company Code; • PRS Comp. Mgt Zone; • WC Account Type; • BFC GBU. <p>Optional:</p> <ul style="list-style-type: none"> • Auth Scope on Company Code; • Company Code; • WC Account subtype; • 2 - BFC Grp of Activ.; • 3 - BFC Activity 1; • 3 - BFC Activity 2; • Qty conv. unit. 	BW_WBK_WCAP_0002	BW_QRY_MVFIWC01_0002 BW_QRY_MVFIWC01_0005 BW_QRY_MVFIWC01_0004 BW_QRY_MVFIWC01_0003 BW_QRY_MVFIWC01_0006
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WC Solvay Group - Payables in Doc/Loc /EUR curr. (Core Workbook)	Shows the list of all vendors and the total balance in Document currency, Local currency and EUR currency.	Mandatory: <ul style="list-style-type: none"> • Conso. view; • Calendar Day; • PRS Company Code; • PRS Comp. Mgt Zone; • BFC GBU. Optional: <ul style="list-style-type: none"> • Auth Scope on Company Code; • Company Code; • Vendor; • WC Account subtype; • 2 - BFC Grp of Activ.; • 3 - BFC Activity 2. 	BW_WBK_WCAP_0005	BW_QRY_MVFIWC01_0011
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2- For Accounting/Legal BFC View

Reports	Definition	Prompts	BW Workbook Query	Query Technical Name
NEW WC CICC BFC Interface (Core Workbook)	<p>In some cases, BFC is manually populated by users thanks to dedicated workbooks in which WC data can be checked and formatted in a way compliant with BFC.</p> <p>In this Workbook we can see the values with the BFC layout for WC for CICC companies in the 1^o, 2^o ad 3^o sheets and perform already some checks based in the existent sheets with the Headings from BFC. The user populate the data in these sheets and this will be uploaded in BFC side.</p>	Mandatory: <ul style="list-style-type: none"> • Conso. view; • Calendar Day; • Legal PRS Comp. Code. Optional: <ul style="list-style-type: none"> • Auth Scope on Company Code; • 2 - BFC Grp of Activ. 	BW_WBK_WCAP_0013	BW_QRY_MVFIWC01_0009

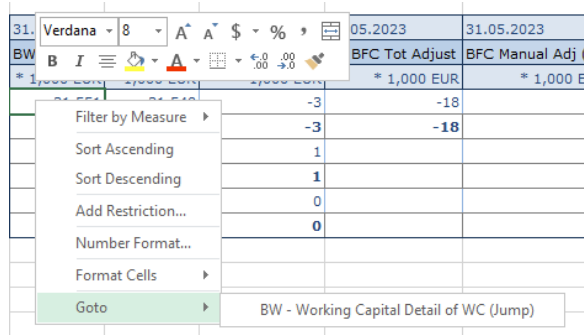
<p>WC Accounting Solvay Group (Core Workbook)</p>	<p>Balance information for receivables, payables and inventories where we can analyze the values by accounting view or legal view.</p> <p>Intercompany and Lease/FAS amounts are possible to check and the measures can be checked for last year period, the period selected and the previous period from the selection.</p>	<p>Mandatory:</p> <ul style="list-style-type: none"> • Conso. view; • Calendar Day; • WC Account type; • Legal PRS Comp. Code; • Currency; • PRS company Code; • PRS Comp. Mgt Zone; • BFC GBU. <p>Optional:</p> <ul style="list-style-type: none"> • Auth Scope on Company Code; • Company Code; • WC Account subtype; • 2 - BFC Grp of Activ; • 3 - BFC Activity 1; • 3 - BFC Activity 2. 	<p>BW_WBK_WC AP_0003</p>	<p>BW_QRY_MV FIWC01_0010</p> <p>BW_QRY_MV FIWC01_0006</p>
<p>WC Detailed FAS transfer (Core Workbook)</p>	<p>Information about the amounts related with Fixed Asset Supplier (CAPEX) in local and EUR currency.</p>	<p>Mandatory:</p> <ul style="list-style-type: none"> • Conso. view; • Calendar Day; • Legal PRS Comp. Code. <p>Optional:</p> <ul style="list-style-type: none"> • Auth Scope on Company Code. 	<p>BW_WBK_WC AP_0017</p>	<p>BW_QRY_MV FIWC03_0002</p>

<p>WC RCS BFC interface (Core Workbook)</p>	<p>same logic as the workbook for NEW WC CICC BFC Interface the BFC will be manually populated by the users and in here the users can check the following reports:</p> <ul style="list-style-type: none"> Working Capital analysis (Receivables, Payables and Inventory) by BFC account, GL accounts, BFC activity 1 and 2 in Local Currency; Overdues FA Suppl. & Asset DP Prepaid GL Account <p>The rest of the sheets are the values from BFC to be checked and compare the data in the other reports (only applicable for WP1):</p> <ul style="list-style-type: none"> L6725 / L6735: Payables/Receivables/Inventory balances (Legal BFC view) by Company/BFC Account/Activitiy; L6740 Overdues: Receivables aging balances (Legal BFC view) by Company/Activitiy (X0770 /X0910/X0771 key fig.) L6725 FA Suppliers: Payables to be transfered as Fixed Asset Suppliers (Legal BFC view) by Company/BFC Account/Activitiy NB: based on WC data but used for CAPEX reporting L6740 FA Suppliers: Prepaid (Legal BFC view) by Company/BFC Account/Activitiy NB: based on WC data but not WC reporting 	<p>Mandatory:</p> <ul style="list-style-type: none"> Conso. view; Calendar Day; Legal PRS Comp. Code. <p>Optional:</p> <ul style="list-style-type: none"> Auth Scope on Company Code; 2 - BFC Grp of Activ. 	<p>BW_WBK_WC AP_0001</p>	<p>BW_QRY_MV FIWC01_0009</p>
<p>WC Solvay Group Annual Overdues interface (Core Workbook)</p>	<p>same logic as the workbook for NEW WC CICC BFC Interface the BFC will be manually populated by the users and in here we have the Receivables aging balances (Legal BFC view) by Company/Activitiy (X04051 key fig.)</p> <p>1° sheet we have the overdue information to check what will be updated in BFC;</p> <p>2° sheet it's information regarding the accounts in the scope;</p> <p>3° sheet the users will populate this with the relevant data to be uploaded in BFC.</p>	<p>Mandatory:</p> <ul style="list-style-type: none"> Conso. view; Calendar Day; Legal PRS Comp. Code. <p>Optional:</p> <ul style="list-style-type: none"> Auth Scope on Company Code; 2 - BFC Grp of Activ. 	<p>BW_WBK_WC AP_0004</p>	<p>BW_QRY_MV FIWC01_0009</p>

Notes:

1- The folder **WCAP - Working Capital in Accounting (not conso.) view** - This is a report for companies which already left Solvay Group but they are working with the system PF1 or WP1 (agreement with Solvay for this).

2- Due to volume of data and for performance purposes, lowest level of detail in postings (including FI Doc. number) is not available in workbooks. Nevertheless, this lowest level of detail can be reached from each of them by selecting jump standard function (Based on BW_QRY_MVFIWC03_0001):

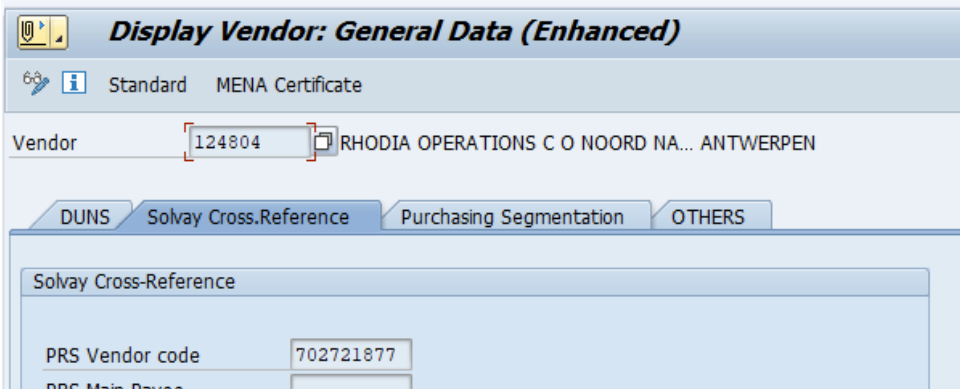


4.0 Functional Specification

4.1 General Data/Calculations

For these reports, it's important to understand some concepts which will allow the user to work with the reports in the same way as the SAP system and BFC tool.

Working Capital Accounts	<p>Components for Payables, Receivables, and Inventory Working Capital (WC) are established based on a BFC Account list, which is maintained in each ERP system within the Table ZZF_BFC_SETACCT - set of accounts by heading, categorized by Family WC.</p> <p>For each Heading (BFC Account), there's at least 1 corresponding Sets of accounts in which are listed at least 1 GL account (Cf. tr. GS03 - Display Set).</p> <p>Those data are uploaded in BW to update GL Account attributes used in reporting.</p> <table border="1" data-bbox="337 342 1463 940"> <thead> <tr> <th data-bbox="337 342 467 394">Attribute</th> <th data-bbox="467 342 1463 394">Comments</th> </tr> </thead> <tbody> <tr> <td data-bbox="337 394 467 531">WC Acct type</td> <td data-bbox="467 394 1463 531"> Cf. Symbolic name in set header, translated in BW according to Global Filter GL_ACCOUNT/GL_TYPE Ex. ZFC-A40160 PAY_102 PAYABLES NB: relevant for authorizations </td> </tr> <tr> <td data-bbox="337 531 467 625">WC Acct subtype</td> <td data-bbox="467 531 1463 625"> Cf. Symbolic name in set header, translated in BW according to Global Filter GL_ACCOUNT/GL_TYPE Ex. ZFC-A40160 PAY_102 ADVANCE PAYMENTS </td> </tr> <tr> <td data-bbox="337 625 467 720">BFC Account</td> <td data-bbox="467 625 1463 720"> Heading in ZZF_BFC_SETACCT Ex.: ZFC-A40160 A40160 </td> </tr> <tr> <td data-bbox="337 720 467 835">GL Acct external flag</td> <td data-bbox="467 720 1463 835"> X if Forced partner = S9999 in ZZF_BFC_SETACCT; it means that no Intercos elimination should be performed for corresponding account Ex.: Z001/40100400 X </td> </tr> <tr> <td data-bbox="337 835 467 940">GL Acct internal flag</td> <td data-bbox="467 835 1463 940"> X if Forced partner = XXXXX in ZZF_BFC_SETACCT and XXXXX is defined as an Internal partner; it means that all postings on corresponding account should be eliminated as intercos (only in PF1 area) Ex.: COCA/22001010000 X </td> </tr> </tbody> </table>	Attribute	Comments	WC Acct type	Cf. Symbolic name in set header, translated in BW according to Global Filter GL_ACCOUNT/GL_TYPE Ex. ZFC-A40160 PAY_102 PAYABLES NB: relevant for authorizations	WC Acct subtype	Cf. Symbolic name in set header, translated in BW according to Global Filter GL_ACCOUNT/GL_TYPE Ex. ZFC-A40160 PAY_102 ADVANCE PAYMENTS	BFC Account	Heading in ZZF_BFC_SETACCT Ex.: ZFC-A40160 A40160	GL Acct external flag	X if Forced partner = S9999 in ZZF_BFC_SETACCT ; it means that no Intercos elimination should be performed for corresponding account Ex.: Z001/40100400 X	GL Acct internal flag	X if Forced partner = XXXXX in ZZF_BFC_SETACCT and XXXXX is defined as an Internal partner; it means that all postings on corresponding account should be eliminated as intercos (only in PF1 area) Ex.: COCA/22001010000 X
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Consolidation View	<p>The query takes the integration rate of the company and the partner from the master data of company code.</p> <ul style="list-style-type: none"> • If Conso method = 50 (Equity) , 20 (Not Conso.) or 60 (Not Equity), Rate = 0%; • If Conso method = 10 (Fully Conso), Rate = 100%; • If Conso method = 30 (Prop), Rate = Integration percentage <p>In this way, the user has 4 options:</p> <ul style="list-style-type: none"> • Option 0 - Legal view: No intercompany eliminations are taking into account; • Option 1 - Consolidated view (for Solvay group): Takes into account the intercompany eliminations (using company code master data); • Option 2 - same logic as option 1 but the data is the consolidated view for Eco Companies • Option 3 - same logic as option 1 but the data is the consolidated view for Sco Companies 												
GBU Assignment	<p>The concept for GBU doesn't exist in SAP but it's a requirement to have in BW since in BFC we have this definition.</p> <p>This GBU assignment is different for WP1 and PF1 and it will be explain in detail in the Process Definition section.</p>												
Currency Conversion	<p>Key figures are always available in Local (Company) currency, and in some queries in Document currency. Amounts in Local currency can be converted in EUR (Group currency) according to ZRH2 monthly exchange rate at Calendar day entered by user in query prompt.</p>												
UoM Conversion	<p>In Inventory analysis, UoM can be converted according to alternative UoM managed in Material master data (ex.: L Kg).</p>												
PRS Concept	<p>The PRS is one dedicated SAP environment (based on PF1) whose aim is to unify some structural information as Master Data information for customers, vendors, company codes, etc. For this, depending on each master data we are referring to, we have specific tables created to maintain the data and have the configuration from source systems to BFC definition and alignment.</p>												

<p>Customers and Vendors</p>	<p>All Solvay Group Customers/Vendors (internal and external) are also managed both in PRS (PF1_050) and in local ERPs.</p> <ul style="list-style-type: none"> • PRS Customer/Vendor: <ul style="list-style-type: none"> ◦ A single Customer/Vendor that may exist as several master data in many local ERPs, is also maintained in PRS in a unique master data (ex. PRS Vendor 702721877) ◦ Internal Partners (eligible for Interco elimination) are Customers/Vendors with an S/L partner in their master data (Cf. KNA1) also defined as a consolidated company in ZZF_T001_MGT (ex. PRS Vendor 702721877 S/L Partner 4274 PRS Comp. Interco flag X PRS Vendor Interco flag X) • Customer/Vendor: <ul style="list-style-type: none"> ◦ Master data maintained in each ERP in a local codification (which is the only known in transactional data) may be different (in WP1 and RHO area) from PRS code (ex. 124804 RHODIA OPERATIONS C/O NOORD NATIE 702721877) ◦ PRS assignment of local master data is maintained in ERP master data. <p>Example: Go to FK03 transaction and when the master data is displayed click on "Additional data" and in the 2^o tab we can see the PRS vendor code:</p>  <p>Note: For reporting convenience, in BW most of PRS attributes are replicated as Customer/Vendor attributes (incl. PRS Vendor Interco flag).</p>
<p>Trading Partner</p>	<p>Information stored in FI document:</p> <ul style="list-style-type: none"> • For all Customer/Vendor entries: S/L Partner issued from Customer/Vendor (local codes) • In few other entries: directly entered in document Relevant for Interco elimination (Cf. below). <p>Values are managed in local ERP accordingly with PRS ZZF_T001_MGT entries:</p> <ul style="list-style-type: none"> • For reporting convenience, in BW PRS attributes are replicated as Trading partner attributes (incl. PRS Trading part. Interco flag); ex.: Trading Partner 4274 PRS Trading partner 4274 PRS Trading part. Interco flag X.
<p>Balance Calculations</p>	<p>WC figures are mostly open items (balances) calculated in reporting the following way: Open items at Calendar day = entries with: Posting date =< Calendar date and (Clearing date > Calendar date and Clearing date = #)</p>
<p>Annual Closing</p>	<p>Each end of year, the main BW master data (about the structure) which are not time-dependent need to be frozen = no more loading from ECC or flat file on these main master data. To avoid the impact of the new evolution scheduled for next year on the yearly closing a freeze is applied to block the loading to allow the yearly closing period with the same scope done for the year and not with inputs for next year, for some master data, the loading are freeze in the middle of December until end of January. So when there is a new organization, historical data is restated in BW (not in SAP and BFC).</p>

4.2 Process Detail

4.2.1. Report/Process Definition

Domain	Finance
Application	BW reports under WCAP - Working Capital Solvay Group
Provider	MVFIWC01

The Working Capital Application has several reports where the users can check the data for Receivables, Payables and Inventories and see the balances to analyze the information with additional assignments in BW and have a better output for the daily/monthly analysis.

In this section we will approach:

- Source of data
- SAP BW High Level view
- GBU Assignment
- Receivables Scope
- Payables Scope
- Factoring Process (CAMS rules)
- Inventories Scope
- BFC Scope
- Intercompany Scope

Source of data

Working Capital data is updated from ERPs FI entries, but also from BFC for reconciliation purposes. See below for each source how are the characteristics:

	ERPs	BFC
Payables	FI postings on Vendor Payables accounts (K) BSIK/BSAK	Flat Files
	FI postings on GL Payables accounts (S) BKPF/BSEG	
	FI postings on Customer Payables accounts (D)* BSID/BSAD * Only PF1/PI1	
Receivables	FI postings on Customer Receivables accounts (D) BSID/BSAD FI postings on GL Receivables accounts (S) BKPF/BSEG	
Inventory (WP1/PF1/RHO only)	FI postings on Material Inventory accounts (M) BKPF/BSEG FI postings on GL Inventory accounts (S) BKPF/BSEG MM document** MKPF/MSEG ** For stock initialization at end of 12.2013	

- BFC data are updated 1 time a day between D4 and D20; 1 file for closing period (Magnitude-BW-SCA_Month.txt), 1 file for previous one (Magnitude-BW-SCA_Month-1.txt);
- SAP data are updated 3 times a day (6 AM, 12 PM and 6PM French time) + for WP1 4 additional time a day (10 AM, 2PM, 4 PM, 10 PM) during closing period (D-1 to D4).

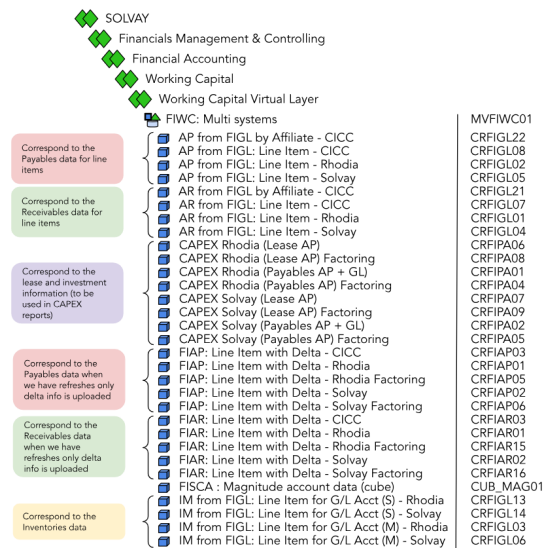
Reporting Views:

Depending on workbook definition WC data are displayed according 3 different views:

- In Legal BFC/Conso. view, external companies are excluded from display
- In Conso. view, SAP balances of entities which are proportionally integrated (PRS Comp. Conso. Method = 30) are revaluated according corresponding integration rate
- In Legal BFC/Conso. view, entries with internal partner are eliminated from balance calculation

SAP BW High level view

To see the data from the source systems see below how the information is organized in the BW perspective:



The cubes where we have the reference "factoring" are specific for data involved in the factoring process according to CAMS which will be explained further in this section.

NB: some (Company + Customer/Vendor) combinations, that do not respect those standard elimination rules, are specifically managed as restricted key figures in query definition.

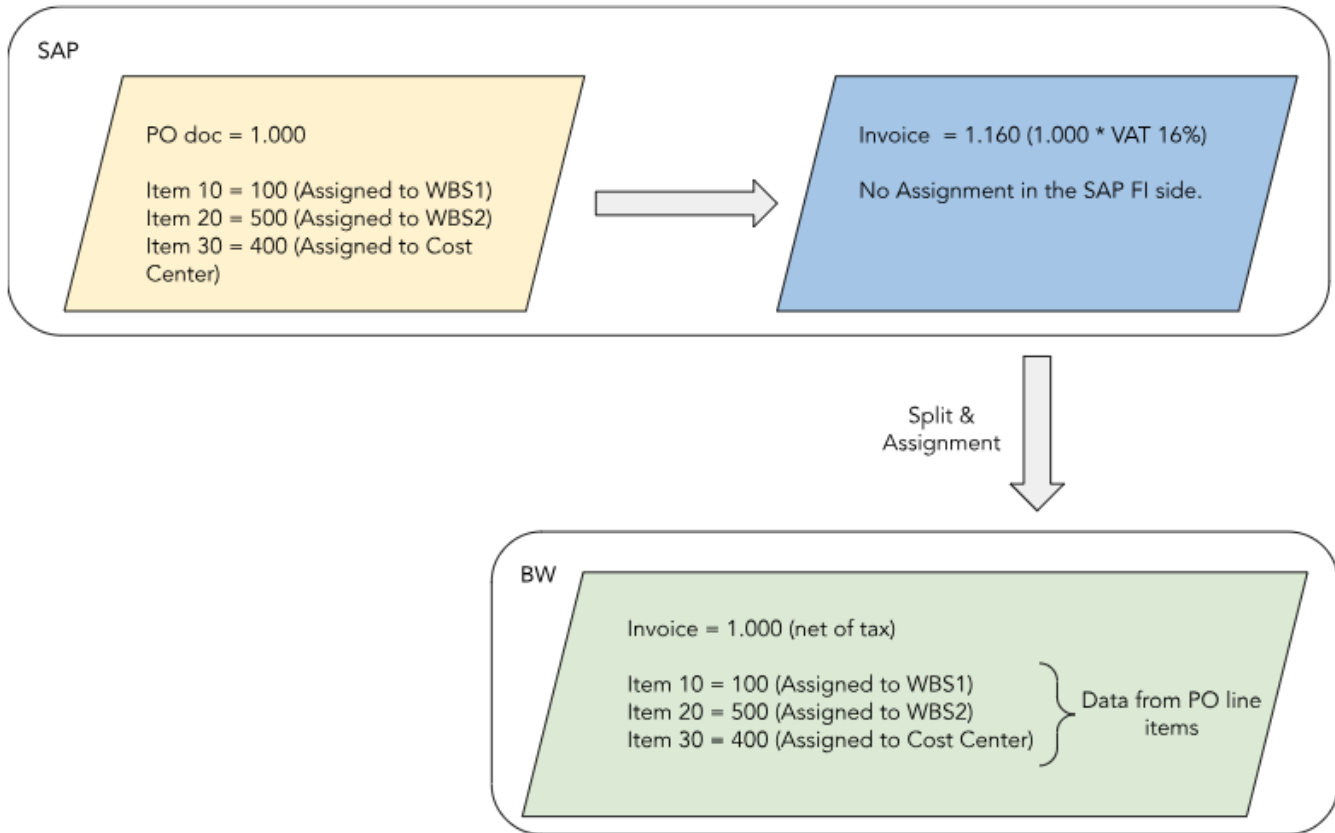
	ERPs	BFC
Payables	FI postings on Vendor Payables accounts (K)	PRS Vendor Interco flag = X (master data)
	FI postings on GL Payables accounts (S)	PRS TP Interco flag = X (document entry)
	FI postings on Customer Payables accounts (D)	PRS Customer Interco flag = X (master data)
Receivables	FI postings on Customer Receivables accounts (D)	PRS Customer Interco flag = X (master data)
	FI postings on GL Receivables accounts (S)	PRS TP Interco flag = X (document entry)
Inventory	FI postings on Material Inventory accounts (M)	N/A
	FI postings on GL Inventory accounts (S)	
	MM document	

GBU Assignment

GBU assignment is based on Sub activity 1/2 (1)

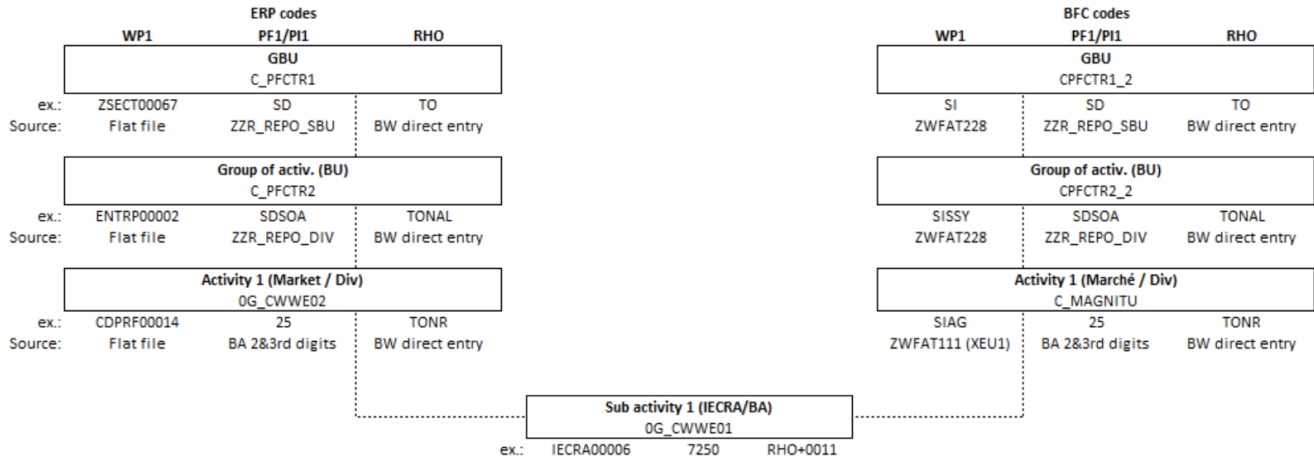
	WP1 (6)	PF1/PI1	RHO
Payables	<u>Sub activity 2</u> K entries: Profit center after split/assignment (5) S entries: Profit center after assignment		<u>Sub activity 2</u> K/D/S entries: BA in posting (1)
Receivables	<u>Sub activity 1</u> D/S entries: IECRA derived from posting (2)		<u>Sub activity 1</u> D/S entries: BA in posting (1)
Inventory	<u>Sub activity 2</u> M/MM entries: Profit center in Material master data (3) S entries: Profit center in posting		<u>Sub activity 2</u> M/MM entries: BA in Material master data (4) S entries: BA in posting (1)

- (1) In PF1/PI1 area, original BA can be forced to target value according to exception entries managed in ZZR_REPO_DIV_EXC
- (2) WP1 Receivables assignment
 - SD related entries: IECRA issued from COPA derivation rule, based on Distribution Channel + Material Division in counterpart item IECRA (ex.: 82 + RI IECRA00006)
 - Other entries: IECRA issued from COPA derivation rule, based on Profit Center in counterpart item IECRA (ex.: ZFR3-I0006 IECRA00006)
 NB: in case of several and various counterparts, there's no split of Customer entry, but an assignment according to the counterpart with the biggest amount
- (3) Profit center is issued from Material master data at Plant level (Cf. MARC)
- (4) BA is issued from T134G according to Material Division (Cf. MARA) and posted Plant
- (5) WP1 Payables assignment
 - Vendor entries (K):
 - Profit center assignment is performed after split of vendor entries according to CO assignment of counterpart entries (in FI or in related PO item); it can be the Profit center of:
 - Assigned Material
 - Assigned Cost center,
 - Requesting/Responsible Cost center of assigned WBSE...
 - Vendor entries (K): CO assignment and split are performed in WP1 when AP data are uploaded in BW thanks to ZWFAT123 update
 - General entries (S): same CO assignment w/o split of entries

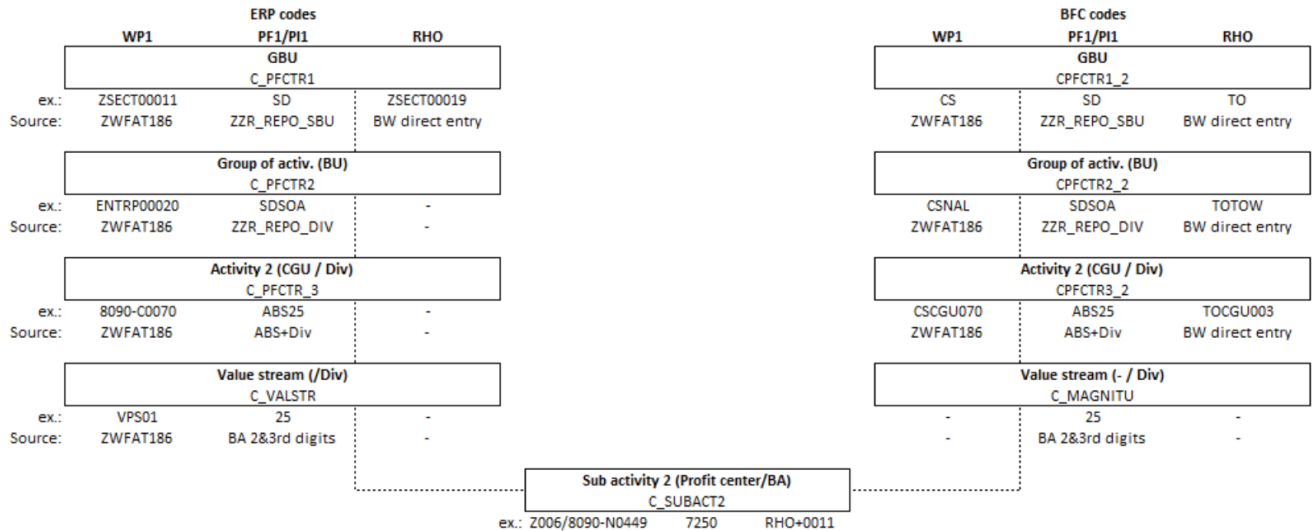


- (6) In WP1 area, any not assigned entries by IECRA/Profit Center can be forced at FI document item level to target value entered in ZWFAT205

GBU determination from Sub activity 1



GBU determination from Sub activity 2



NB: ZWFAT186 is a « flat » picture of Profit center standard hierarchy. PF1 ZZB_BFC_DIV_CONV

Receivables Scope

Specific business rules:

- A41100, A49100 and L41160 BFC Accounts related entries;
- Receivables formula calculation including:
 - Entries forced as internal
 - Acetow (6450) external Customer WVK displayed at 49,9%
 - Butachimie external (0560) Customer Invista managed as internal
 - Solvay Sodi external (3438) Customers SODASANA and SISECAM managed as internal
 - Carryforward Document types S7, S8 and ZU in Italian companies excluded from display

Dedicated workbooks Queries (1)

- BW_WBK_WCAP_0002 BW - NEW WC Solvay Group GBU (Core Workbook) + BW_WBK_WCAP_0009 BW - NEW WC GBU Solvay Group - BFC vs BW extract (Core Workbook) BW_QRY_MVFIWC01_0003
 - Due/Overdue classification
 - L41160 and A49100 related entries are excluded from categorization
 - Customer entries are classified as Due /Overdue according to Calculated Net due Date which is not different from Original Net due Date issued from SAP (BSID/BSAD)
 - Cash in/out = Customer cleared entries (excluding payment documents). NB: Clearing date is considered as Payment date

DEC 2015	01 vs DEC N-1	JAN 2016	FEB 2016	MAR 2016	03.04.2016	30.04.2016	01 vs 0-7	Cash in/out	Due	Due	Due	Due
1,000 EUR	* 1,000 EUR	* 1,000 EUR	* 1,000 EUR	* 1,000 EUR	* 1,000 EUR	* 1,000 EUR	* 1,000 EUR	* 1,000 EUR	* 1,000 EUR	* 1,000 EUR	* 1,000 EUR	* 1,000 EUR

Dedicated workbooks Queries (2)

- BW_WBK_WCAP_0012 BW - NEW WC GBU Solvay Group - Rec. Aged balance (Core Workbook) BW_QRY_MVFIWC01_0012
 - Outstanding: whole Receivables balance
 - Overdues: Net due date <= Key date

Outstanding	Overdue	Overdue	Overdue	Overdue	Overdue	Overdue	Overdue
30.04.2016	30.04.2016	0-4 days	5-10 days	11-30 days	31-60 days	61-90 days	>90 days
* 1,000 EUR	* 1,000 EUR	* 1,000 EUR	* 1,000 EUR	* 1,000 EUR	* 1,000 EUR	* 1,000 EUR	* 1,000 EUR

Payables Scope

Specific business rules:

- L40100 and A40160 BFC Accounts related entries;
- WP1 Payables entries are net of Investment and Lease open items as reposted during month-end closing process:
 - Fixed Asset Suppliers: Vendor and GL entries assigned in BW to an invest. WBSE, or to a PM order assigned in its settlement rules to an invest. WBSE
 - Lease Suppliers: Vendor entries assigned in BW to a Lease contract (relevant for IFRS16 valuation)
 - NB: both are valuated Net of tax
- Payables formula calculation detailed including:
 - Entries forced as internal

Dedicated workbooks Queries

- BW_WBK_WCAP_0002 BW - NEW WC Solvay Group GBU (Core Workbook) + BW_WBK_WCAP_0008 BW - NEW WC GBU Solvay Group - Payables extract (Core Workbook) BW_QRY_MVFIWC01_0004

DEC 2015	01 vs DEC N-1	JAN 2016	FEB 2016	MAR 2016	03.04.2016	30.04.2016	01 vs 0-7	Cash in/out	Due	Due	Due	Due
1,000 EUR	* 1,000 EUR	* 1,000 EUR	* 1,000 EUR	* 1,000 EUR	* 1,000 EUR	* 1,000 EUR	* 1,000 EUR	* 1,000 EUR	* 1,000 EUR	* 1,000 EUR	* 1,000 EUR	* 1,000 EUR

- Due/Overdue classification (1)
 - A40160 related entries are excluded from categorization

- Acetow (6450) external Vendor WVK displayed at 49,9%
- Butachimie (0560) external Vendor Invista managed as internal
- Carryforward Document types S7, S8 and ZU in Italian companies excluded from display
- Vendor entries are classified as Overdue according to Original. Net due Date directly issued from SAP (BSIK /BSAK)
- Due/Overdue classification (2)
 - They are classified as Due according to Net due Date, which is a calculated due date issued from table ZZF_BSEG For all FI doc. item not maintained in ZZF_BSEG, Net due date = Original. Net due Date, else Net due date <> Original. Net due Date (Cf. entries with Calc.<>Orig. Net due date (Pay.) = X)

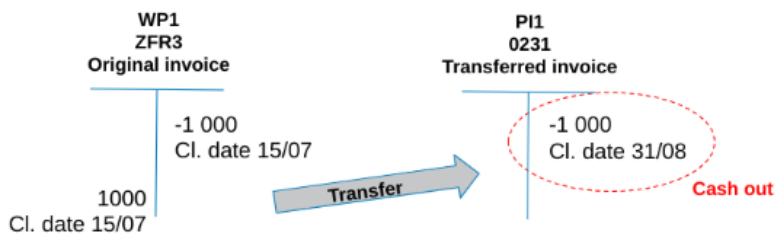
NB: for Customer entries which are part of PF1/PI1 Payables balances, there's no difference between Net due Date and Original. Net due Date

- BW_WBK_WCAP_0005 BW - NEW WC Solvay Group - Payables in Doc/Loc/EUR curr. (Core Workbook) BW_QRY_MVFIWC01_0011

Factoring Process (CAMS rules)

In working capital we have the factoring concept, where due to specific conditions we have some cases where the postings are transferred to the CICC company and the data in the SAP systems (PF1/WP1) will be cleared.

- when the invoices are transferred to CICC according to CAMS process are considered to be paid when they are cleared in CICC (PI1 Legal company 0231/4044), and not when they are cleared in the original company (ex. WP1 Affiliate ZFR3) at the time of the transfer.
- FI documents in Affiliate (origin) WP1/PF1 companies and in Legal PI1 companies are linked by a unique factoring contract number managed in table ZZF_BSEG.



	Company (Affiliate)	Legal Company
No transfer	ZFR3	ZFR3
Transfer (CAMS)	ZFR3	0231

For specific business rules:

- In Consolidated reports, data are displayed in an Affiliate point of view:
 - For ex. if 4274 company is selected, not only open items in 4274 are displayed, but also cleared items linked to PI1 open items
- In other reports (Legal BFC and Accounting views), they are displayed in Legal company point of view:
 - For ex. if 4274 company is selected, only open items in 4274 are displayed
 - NB: to get the same whole affiliate point of view as described in previous point, it needs to select 4274 + 0231/4044 Legal companies, and then to filter on 4274 affiliate.

					28.02.2019
Source syst.	PRS Company code	WC Acct type	Legal Comp. code		* 1 000 EUR
WP1_400	4274	PAYABLES	PI1_020/0231	SOLVAY CICC	-69 577
			PI1_020/4044	SOLVAY FINANCE (US)	-549
			WP1_400/ZFR3	RHODIA OPERATIONS	-86 343
	Result				-156 470
Overall Result					-156 470

Inventories Scope

Dedicated workbooks Queries

Specific business rules (1)

- A31000, A34000, A37000, A39100, A39400 and A39700 BFC Accounts related entries;
- Historical data upload
 - Due to volumes of data and for performance purposes, it has been decided to update MM related Inventory data (linked to a Material document) from FI (Cf. M entries) only up to 01/01/2014
 - A snapshot has been done on 31/12/2013, based on
 - WP1/RHO: MBEW/MBEWH entries
 - PF1: PQ1 entries (as stored in ZZMIC_01)
- Technical Material Plant object
 - Some characteristics are not the ones entered in SAP transactional data, but are re defined at current date in order to insure consistency between BW data and Stock reports in SAP (Cf. tr. MB5B and MB5L)
 - They are managed in a BW compounded technical Material Plant object, including:
 - Valuation class: current Class defined in MBEW/MBEWH at Material/Plant/Valuation type level; ex.: Material 14477 / Plant (Val. Area) 0087 Valuation class Z150
 - GL account (and related BFC Account): current account defined in T030 for Transaction BSX and Valuation class; ex.: Valuation class Z150 37000100 (A37000)
 - Material Division: current Division defined at Material level in MARA
 - Material Profit center (and related GBU): current Profit center as defined at Material /Plant level in MARC; ex.: 14477 / 0087 Profit center 8090-I0534
 - Material BA (and related GBU): current BA as defined in T134G at Plant/Division (Cf. MARC) leve

NB: for S entries, GL Account and Profit center/BA are issued from postings

- Inventory formula calculation detailed including:
 - PF1 manual entries on MM automatic accounts (Cf. Stock account (BSX) excluded from display, in order to not count twice historical entries uploaded from PQ1 and corresponding S postings uploaded from PF1
 - Carryforward Document types S7, S8 and ZU in Italian companies are excluded from display.

- BW_WBK_WCAP_0002 BW - NEW WC Solvay Group GBU (Core Workbook) + BW_WBK_WCAP_0007 BW - NEW WC GBU Solvay Group - Inventory extract (Core Workbook) BW_QRY_MVFIWC01_0005

PER 2016	MAR 2016	01-01-2016	01-01-2016	JAN 2016	FEB 2016	MAR 2016	01-01-2016	01-01-2016	JAN 2016
Total Stock Quantity	Total Stock Quantity	Total Stock Quantity	Total Stock value	Total Stock value	Total Stock value	Total Stock value	Total Stock value	Total Stock value	Unit price
			* 1 000 EUR	* 1 000 EUR	* 1 000 EUR	* 1 000 EUR	* 1 000 EUR	* 1 000 EUR	Unit price

BFC Scope

BFC data are uploaded in BW:

- To perform SAP data quality check when compared to FC pack entries in BFC;
- To get overall conso. figures by enhancing SAP postings with:
 - Conso. adjustment postings (manual and automatic) entered directly in BFC w/o correspondence in SAP;
 - WC data of conso. companies that are managed out of SAP.

Specific business rules

- Selected Calendar day needs to be last of the month (ex. 30/04/2016)

In some cases, BFC is manually populated by users thanks to dedicated workbooks in which WC data can be checked and formatted in a way compliant with BFC:

Dedicated workbooks Queries (1)

- BW_WBK_WCAP_0002 BW - NEW WC Solvay Group GBU (Core Workbook) + BW_WBK_WCAP_0010 BW - NEW WC GBU Solvay Group - BFC vs BW extract (Core Workbook) BW_QRY_MVFIWC01_0006

BW	FC Pack	FC Pack vs BW	FC Tot Adjust	FC Manual Adj (1)	FC Auto Adj (2)	FC Top Adj (3)	FC Conso	FC Conso vs BW
* 1 000 EUR	* 1 000 EUR	* 1 000 EUR	* 1 000 EUR	* 1 000 EUR	* 1 000 EUR	* 1 000 EUR	* 1 000 EUR	* 1 000 EUR

- FC Pack field: data issued from SAP (BFC Nature 0LIA01)
- FC Tot Adjust
 - FC Manual Adj (1): BFC entries with BFC Nature 1LIA05, 1RET-EX, 1RET50, 1RET90, 1RET91, 1RET95 and 1SOL11 (« spot » manual entries that are normally re integrated in Package in M+1)
 - FC Auto Adj (2): BFC entries with BFC Nature 2NRI40, 2NRI50 (in WP1 area, elimination of margin in Inventories)
 - FC Top Adj (3): BFC entries with BFC Nature 3TOP10, 3TOP20, 3TOPHISTO, 3TOPSOL and 3TOPGEST (corrections linked to IP % consolidation rate)
- FC Conso = FC Pack + FC Tot Adjust

	WP1	PF1/P11
BW_WBK_WCAP_0001 BW - NEW WC RCS BFC Interface (Core Workbook) □ BW_QRY_MVFIWC01_0009	L6725 / L6735 Payables/Receivables/Inventory balances (Legal BFC view) by Company/BFC Account/Activity	N/A
	L6740 Overdues Receivables aging balances (Legal BFC view) by Company/Activity (X0770/X0910/X0771 key fig.)	
	L6725 FA Suppliers Payables to be transferred as Fixed Asset Suppliers (Legal BFC view) by Company/BFC Account/Activity NB: based on WC data but used for CAPEX reporting	
	L6740 FA Suppliers Prepaid (Legal BFC view) by Company/BFC Account/Activity NB: based on WC data but not WC reporting	
BW_WBK_WCAP_0004 BW - NEW WC Solvay Group Annual Overdues Interface (Core Workbook)	L6880 Overdues Receivables aging balances (Legal BFC view) by Company/Activity (X04051 key fig.)	
BW_WBK_WCAP_0011 BW - NEW WC Solvay Group Monthly Overdues Interface (Core Workbook)	L6740 Overdues Receivables aging balances (Legal BFC view) by Company/Activity (X0770/X0910/X0771 key fig.)	

Intercompany Scope

Intercompany aged balance

- Comparison in a single workbook of both Receivables and Payables internal postings (Customer and Vendor entries only)
- Dedicated workbooks Queries
 - BW_WBK_INTERCO_0001 Intercompany Aged Balance BW_QRY_MVFIWC01_0020/0021

Delay	Amount Doc. curr.	Amount Loc. curr.	Amount Converted
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- Delay (d) = (selected) calendar day) Net due date
- Possibility to filter AP entries for an entered partner (as a PRS Company code):

	Last Update	13/6/16 12:20 PM			
	Pivot Date	30.04.2016			
PRS Comp Entr PRS	Source System	PRS Comp. Geo. zone	PRS Comp. Country	PRS Comp Conso Meth	PRS Compar
Filter AP Sheet (Vendor Enterprise PRS)	WPI Client 400	EU	IT	Fully consolidated	8090
	WPI Client 400	EU	IT	Fully consolidated	8090
	WPI Client 400	EU	IT	Fully consolidated	8090
	WPI Client 400	EU	IT	Fully consolidated	8090
	WPI Client 400	EU	IT	Fully consolidated	8090

List of service invoices

- Counting and valuation by period of Customer documents identifying service invoices in WP1/PF1 area

Dedicated workbooks Queries

- BW_WBK_INT_0002 BW - List of service invoices (Core Workbook) BW_QRY_MVFIWC03_0010

[-] Records	Amount Doc. curr.	Amount Loc. curr.
	EUR	EUR

- WP1: FI Doc. Type RV and Billing type ZLS2, ZG2S, ZS4, ZS5, ZL2B and Z2G + FI Doc. Type DG, DR and RC
- PF1: FI Doc. Type C0, CA, CC, CS and RC

5.0 Non-functional Descriptions

5.1 Usability

as per standards

5.2 Regulatory Compliance

as per standards

5.3 Security

as per standards

5.4 Performance

as per standards

5.5 Reliability

as per standards

5.6 Scalability

as per standards

5.7 Compatibility

as per standards

5.8 Availability

as per standards

5.9 Refresh of the Data

The Working Capital data is updated from ERPs Financial entries, but also from BFC for reconciliation purposes. As such, the following load times exist:

- BFC data is updated 1 time a day between D4 and D20;
 - 1 file for closing period (Magnitude-BW-SCA_Month.txt);
 - 1 file for the previous one (Magnitude-BW-SCA_Month-1.txt).
- SAP data is updated 3 times a day (6 AM, 12 PM and 6PM French time) + for WP1 4 additional time a day (10 AM, 2PM, 4 PM, 10 PM) during closing period (D-1 to D4)

The load normally takes approximately 90 minutes and when the data is refreshed it uploads only the delta information.