4. **Functional Specification**

1. **Functional Description**

This report extracts financial line item data from SAP General Ledger accounting table ACDOCA, applies various filters and transformations, and exports the data either to a local file or to a specified HFM directory for upload. The report supports selection of company codes, profit centers, accounts, fiscal year, and other financial dimensions. It also supports authority checks and schedule manager monitoring.

2. **Flow Diagram**

See attached complete workflow agreed with the business.

[Perform Upload into FDM/HFM | Model | Hub | SAP Signavio](#)

Perform Upload into
FDM_HFM.pdf

3. **Unit Testing**

- Scenarios: Check if reports and files to be sent to HFM are correct.

-

5. **Design Specification**

Lonza Requirements as follows:

The program reads data from the following tables:

- ACDOCA: General Ledger line items for financial accounting.

- BKPF: Accounting document header.

- SKA1: G/L account master (chart of accounts level).

- SKB1: G/L account master (company code level).

- T001: Company codes

- TZUN, T9F14: Custom or interface-specific tables.

Details of the program:

Selection Criteria: General Selections
Users can filter data by:

- Legder (RLDNR)

- Company Code (RBUKRS)

- FR-Unit (FRNU)

- Posting period (months 01 to 12)

- Fiscal Year (RYEAR)

- Division factor (DIVI) for scaling amounts – This is to be checked during build if needed

- Filter using FI selections block (see selections criteria below)

- Download mode selection (list output, file download, HFM upload)

User Inputs:
The report includes selection screen blocks for general parameters, financial filters, and output options such as:

- List Display

- File path/name for output (default c:\temp\fibu\hfm\HFM.dat)

- HFM location identifier (used for upload path)

Authorization Checks:

Performs authorization checks to ensure user has F_BKPF_BUK activity '03' on the selected company codes.

(Note: The SAP authorization object **F_BKPF_BUK** controls access to **financial accounting documents** based on **company code (BUKRS)** and **activity type (ACTVT)**. It's primarily used in **FI (Financial Accounting)** modules to restrict who can **display(00), create (01), change(02), or delete(03)** accounting documents in specific company codes.)

Processing Logic:

- Reads ACDOCA data filtered by the selection.

- For each line item, checks account master data (SKA1, SKB1) and company code data (T001).

- Aggregates balances and converts amounts according to division factor (DIVI). – This is to be checked during build if needed as we will replace FAGLFLEXT with ACDOCA table

- Supports functional area splitting and special handling of certain accounts.

- Collects data into internal tables structured for export.

- Sorts the aggregated data for final output.

Output Options:

- **List Display:** Displays summarized data on screen.

- **File Download:** Exports data as ASCII text file to local file system.
  (C:\TEMP\FIBU\HFM\HFM.DAT – to be confirmed with CPI team)

- **HFM Upload:** Writes file to HFM inbox folder (network path \\chvsap150.saplonza.net\FDMshare\FDMEE\inbox\ plus location and filename from config – to be confirmed with CPI/Technical Team). Need path file from CPI team or technical team for the connectivity to HFM (lower/test environment)

File Format:
Fixed-length record layout (72 characters) with fields separated by semicolons; amounts formatted with sign and decimal scaling as per division parameter.

Error Handling:

- Checks for missing or incorrect parameters.

- Reports missing or incorrect master data.

- Displays messages for authorization failures or file errors.

Schedule Manager Integration:
Supports initialization and closing of Schedule Manager monitoring for background job tracking (SAP Note 325118).

Sample File attached:

HFM.DAT

Input and Output Parameters

Selection Criteria: General Selections

Parameter	Description	Type / Table Field	Default / Range	Comments
RLDNR	Ledger number	ACDOCA-RLDNR	'0L'	
FRNU	Functional Unit (custom)	T9F14-FR_UNIT	User input	Multi-selection
RBUKRS	Company code	ACDOCA-RBUKRS	User input	Multi-selection possible
BUPE	Month (for period filtering)	BKPF-BUDAT+4(2)	01 to 12	Range selection
RYEAR	Fiscal year	ACDOCA-RYEAR	Current year (default)	Exact match only
DIVI	Division factor for amounts	Numeric	Default '1000'	Amounts are divided by this

Selection Criteria: FI Selections

Parameter	Description	Type / Table Field	Default / Range	Comments
RACCT	G/L Account	ACDOCA-RACCT	Optional multi-select	
PRCTR	Profit Center	RACCT-PRCTR	Optional multi-select	
PC Flag	with Profit Center (X)	CHAR1		
MVT Flag	with movements (X)	CHAR1		
BSKZ / ESKZ	Special ledger indicators	SKB1-ZUAWA	Defaults ranges (090-094 incl., 095-099 excl.)	Must be incl/excl only

			Remove default ranges for now but keep the sort keys on the parameters	
RFAREA / ELIC	Functional Area / Exclusion list	ACDOCA-RFAREA	Optional multi-select	

Selection Criteria: List or Download

Parameter	Description	Type / Table Field	Default / Range	Comments
LIST / DOWN / DLHFM	Output mode flags (list, download, HFM upload)	Boolean / Radio Buttons		Controls file output mode
DATEI	File path for output file	String	Default 'c:\temp\fibu\hfm\HFM.dat'	Used in download mode
P_LOC	Location for HFM file output	CHAR12	Required if DLHFM selected	Used for network file path

Output

Sample file to be loaded in FTP server (For confirmation with CPI team)

HFM.DAT

Table - Field	Description	Comments

ACDOCA-RBUKRS	Company Code	CHAR4
ACDOCA-PRCTR	Profit Center	CHAR10
ACDOCA-FRNU	FR-Unit	CHAR8 Not yet configured, we need the list for global template
ACDOCA-RACCT	GL Account	CHAR7 - From 6 digits to 7 digits
ACDOCA-RMVCT	Transaction Type	CHAR3
ACDOCA-RASSC	Trading Partner	CHAR6 Need to be 6 digits on the file – leave a space after if trading partner is below 6 characters BZW99　　　　Trading Partner ES BZX99 Trading Partner SG BZY99 Trading Partner CH BZZ99 Trading Partner US
ACDOCA-PPRCTR	Partner Profit Center	CHAR10
ACDOCA- HSL	Balance	e.g. -0000000022.37000 (Sample format) Note: Field subject to change depending on the amounts provided in S4. Sum of HSL per filtered fields above.

Developer note:

- For those with defaults on the selection parameters – create a TVARVC maintenance per client per environment especially for the file path.

- HFM should be able to receive the .DAT file format with no errors

Design approach:

- Need confirmation for Fiori App/GUI approach – **Fiori First**

- Another enhancement will be created for the HFM Validation Checks (see JIRA no.)

Development

1. **Configuration**

1. **Configuration reference**

Configuration path (IMG, table, …)	

1. **Purpose of configuration**

2. **Workflow**

1. **Technical Reference**

Object Name	Object Type	Object Description

2. **Flow Diagram**

3. **Steps Description**

4. **Technical Details**

Trigger Mechanism	
Start Condition	
Business Object	
Standard Workflow Task / Template	
Level of Approval Required	
Agent Determination Technique	Role - Security Role Org Unit - HR Org Structure Custom Table - Agents in custom table Distribution Lists Unspecified - To be decided in Functional Specification Other
Mention Logic for Agent Determination (if any)	N/A
Notification Destination	Internal User (Mail Inbox) External User (email address)
Workflow Notifications Text	N/A
Escalation Handling (if any)	N/A
Integration with Portal	N/A

Configuration Dependencies	N/A
Error Handling (if any)	N/A
Substitution	N/A

5. Authorization

No	Business Catalog	Authorization Parameter	Parameter Value

3. Report

1. Technical Reference

Object Name	Object Type	Object Description

2. Selection Screen Details

Name	Type	Parameter or Select Option	Comments (Range, Single/Multiples selections, Patterns Mandatory etc.)	Default Value
	Table-Field Check Box Radio Button with Group	Parameter Select Option		
	Table-Field Check Box Radio Button with Group	Parameter Select Option		

3. **Desired Screen Design**

4. **Technical Details**

5. **Starting Conditions**

6. **Data Mapping Tables**

Field Name	Field Description	Output Length	Output Type	Format	Position	Screen No / Field Name

7. **Report Example**

8. **Authorization**

No	Business Catalog	Authorization Parameter	Parameter Value

4. Interface

1. Technical Reference

Object Name	Object Type	Object Description

2. Technical Details

Interface Name	
Direction (with respect to this system)	Inbound Outbound other If other, please specify exactly
Interface Type	Batch near real-time real-time other If other, please specify exactly
Interface Frequency	Hourly Details: Daily Details: Weekly Details: Monthly Details: Quarterly Details:

	Yearly Details:
	On-Demand Details:
	Other Details:
Type of Records Sent	Delta Fields Delta full-record other
	If other, please specify exactly
Volume (per single execution)	N/A

3. **Flow logic**

4. **Interface Data Layout**

Source Structure	Source Field	Description	Data Type	Length	Transformation	Target Structure	Target Field	Description	Data Type	Length	Mand / Opt.	Comments/Remarks

5. **Mapping Rules & Conversion Criteria**

6. **Special Case: Bi-Directional Real-Time Interface**

7. **Sample Data**

8. **Data Retention**

Selection		Comments
	None	
	7 Days	
	15 Days	
	30 Days	
	Other	

9. Middleware Solution

10. Interface Scheduling

11. Authorization

No	Business Catalog	Authorization Parameter	Parameter Value

12. Other system documentation

5. Conversion

1. Technical Reference

Object Name	Object Type	Object Description

2. Technical Details

Conversion Name	

3. Conversion Data Layout

Source Structure	Source Field	Description	Data Type	Length	Transformation	Target Structure	Target Field	Description	Data Type	Length	Mand/Opt.	Comments/Remarks

4. Mapping Rules & Conversion Criteria

5. Sample Data

6. Authorization

No	Business Catalog	Authorization Parameter	Parameter Value

6. **Enhancement**

1. **Business Add-Ins (BADIs)**

BADI Property	Value/Object
System	
Transaction	
Enhancement Spot	
BADI Name	
Enhancement Implementation	
BADI Implementation	
Class	
Method	
Filter	
OData Service	

2. **Implicit Enhancement**

Property	Value/Object

Transaction	
Enhanced Object	
Implementation	

3. User-Exits

Property	Value/Object
Transaction	
Main Program	
Includes	
Form Routines	

4. CDS Views Extension

1. Technical Reference

Property	Value/Object
Original CDS View Name	
Extended CDS View Name	
Purpose of Extension	
Extension Type	☐CDS View Extension ☐Custom CDS consuming Standard CDS

	☐View with Additional Associations or Joins ☐Metadata Extension
Odata Exposure	☐Yes ☐No
Input Field Parameters	
Service Definition	
Service Binding	

2. Fields Added

Field Name	Data Element	Source Table	Description	Annotations

5. Function Exits

Property	Value/Object
Transaction	
Enhancement	
Function Module Name	
Includes	

6. Field Exits

Property	Value/Object
Enhancement	
Main Program Name	
Function Module Name	
Field Exit Id	
Screen Number	
Screen Field Name	
Conditions for execution	

7. Menu Exits

Property	Value/Object
Enhancement	
Menu/Path	
Function/Transaction Code	

8. Screen Exits

Property	Value/Object

Enhancement	
Main Program Name	
Screen Number	
Program Name & Sub-Screen Number	

9. Search Help Exits

Field Name	Field Description	Import / Export (I/E)	Key Field (Y/N)	Data Element	Type (CHAR, NUMC)	Length	Default Value

10. Search Help assignment

Property	Value/Object
Standard Search Help	
Collective Search Help	
Elementary Search Help	

11. Business Transaction Events (BTE)

Property	Value/Object
Transaction	
BTE Number	
Product Name	
Function Module	

12. Custom Transaction

13. Requirement routine

Menu/Submenu	
Routine number	
Business logic required	

14. Substitution

Validation Description	Fields required for validation	Point of Validation	Table used in validation	Business Rules

Substituted Field	Derived from Field	Table used in Substitution	Business Rules

15. Flow logic

16. Authorization

No	Business Catalog	Authorization Parameter	Parameter Value

7. Form

1. Technical Reference

Object Name	Object Type	Object Description

2. Form Layout

N/A

3. Layout Windows

Reference	Print on page	Label Position
		X : Y :
		X : Y :
		X : Y :
		X : Y :
		X : Y :
		X : Y :
		X : Y :

4. Field Mapping

Field	Field Description	Functionality	Logic	Print on page	Font	Font Format	Window

5. Standard Texts / Text Modules

Reference	Text	Print on page	Label Position	Font	Output Format	Font Format

6. Translation

Reference	Description of use (in Language1)	Description of use (in Language2)	Description of use (in Language3)	Text Module Name	Notes

7. Layout Details

Position of Left Margin (specify unit)	
Position of Right Margin (specify unit)	
Position of Logo (specify unit)	

Logo (specify logo)	
Position of Main Window (specify unit)	

8. **Flow logic**

9. **Authorization**

No	Business Catalog	Authorization Parameter	Parameter Value

8. **Fiori Application**

1. **Header Information**

Application Title	
Application ID	
Type of Enhancement	☒Custom Application ☐ Standard Application
Development Type	
Application Type	

UI Enhancements	☐Custom Fields Added ☐UI Layout Modified ☐Extensibility Hook Used ☐Fragments or Views Introduced

2. Technical Reference

Object Name	Object Type	Object Description

3. Desired Screen Design

4. Technical Details

5. Authorization

No	Business Catalog	Name of Space (L2)	Name of Page (L3)	Name of Section (L4)	Name of App/Tile(L5)	Authorization Parameter	Parameter Value

6. Custom Tables/Structure

Table Name	
Short text	
Size category	
Table maintenance allowed	
Maintenance Type	Manual / Automatic Maintenance (application table) Transportable Maintenance (customizing table)
Data class	
Buffering	
Table maintenance generation	
Authorization Group	
Change Log Enabled (Y/N) *(mandatory for GxP related table)*	
SPRO Path *(mandatory for customizing tables)*	

Field Name	Data Element	Domain	Type	Length	Check Table-Field	Key Field	Foreign Key	Description
Comments								

7. Error Handling

1. Error Messages

Error Message Number	Error Message Text (70 characters)	Error Conditions
To be filled up by ABAP	No ledger exists	When user put a ledger that is not existing
To be filled up by ABAP	No FR-Unit exists	When user put an FR-Unit that is not existing
To be filled up by ABAP	No Company Code exists	When user put a company code that is not existing
To be filled up by ABAP	Please enter numeric value	When user puts non numeric value in field DIVI
To be filled up by ABAP	No GL account exists	When GL account is not existing

To be filled up by ABAP	No functional area exists	When FA is not existing
To be filled up by ABAP	File hasn't been created!	Error on program, technical failure
To be filled up by ABAP	No Authority to open the file!	No authorization to create or save the file on the server path
To be filled up by ABAP	Sort key not in table TZUN	When sort key is not existing
To be filled up by ABAP	please enter a Location!	When there is an invalid file path location
To be filled up by ABAP	Output File could not be opened!	Error on program, technical failure

8. **Validation**

1. **Test Case References**

Test Case ID	Test Case	Comment
1	Validate correct download file generation for a company code	Ensure that the report correctly extracts balances from ACDOCA, processes them, and creates a properly formatted output file Check for messages below: Output File could not be opened! File has been created!

		File hasn't been created!
2	Run with DLHFM option instead of DOWNLOAD or LIST	File is written to HFM FTP server
3	Enter invalid DIVI value (0)	Error: Please enter numeric value
4	No functional unit in T9F14	Error: Line displayed with blank FRUNI, not created in table T9F14
5	Empty RASSC, but PPRCTR exists	PPRCTR should be cleared in output
6	GL account not found in SKA1/SKB1	Record rejected, error written to list Account not created
7	User lacks authorization for company code	Message text-051 shown: No authorization No Authority to open the file!
8	Validation on existing company code	Company code not valid
9	Sort key not valid	Sort key not in table TZUN
10	No path file for DOWNLOAD and DLHFM option	please enter a Location!
11	Fields not existing from selection parameters	doesn't exist!
12	Check if file is save on the FTP server/path file	Files should exist on the server path and HFM should be able to process the flle