

# **SAP ALV Report to Fiori List RAP Transformation**



## **SAP RAP REAL-TIME PROJECT**

**Ram Niwas**

LinkedIn

[www.linkedin.com/in/ram-niwas-04](https://www.linkedin.com/in/ram-niwas-04)

# AGENDA

- Understand the existing report
- Naming Convention of RAP
- CDS Table Function :Why and How
- Virtual element in CDS
- Table Data Updates through Action Buttons
- Navigation to other Application
- Disable Object page
- Horizontal Scroll Bar: UI Enhancements
- Material Quantity Conversion: Practical Scenarios



# UNDERSTANDING THE EXISTING REPORT

## ➤ Overview:

- What is an ALV/SALV Report?
- Key Features and Limitations in the Traditional Format.

## ➤ Objective:

- Why migrate to Fiori List Display?
- Benefits of using RAP (ABAP RESTful Application Programming).





# **SAP Naming Conventions: CDS and RAP**

## **Best Practices for Consistent Naming in SAP Development**



# **SAP RAP REAL-TIME PROJECT**

**Ram Niwas**

LinkedIn

[www.linkedin.com/in/ram-niwas-04](https://www.linkedin.com/in/ram-niwas-04)

YouTube :

<https://www.youtube.com/c/SAPTECHNOMANIAC>

# AGENDA

- SAP CDS Naming Conventions
- SAP RAP Naming Conventions
- Launchpad Configuration Objects
- Examples and Guidelines



# SAP CDS NAMING FORMAT

## ➤ General Format:

- Z/Y[Type][Module][Description]\_[SUFFIX]
- Example: ZI\_PTP\_MaterialsBasic



# TYPE CLASSIFICATIONS

Type	View Classification	Example
R I	Basic interface view (Reusable)	ZR_MM_Materials
	Composite interface view	ZI_MM_Purchasing
C	Consumption/Projection view	ZC_SD_SalesConsumption
A	Remote API view	ZA_HR_Employee_API
X	View extension	ZX_MM_PurchaseOrder_EXT
E	Extension include view	ZE_SD_SalesOrderInclude
F	Derivation function	ZF_FI_FinanceTaxCalc
D	Abstract entity	ZD_MM_LogisticsEntity



# SUFFIX USAGE IN CDS NAMING

Suffix	View Type	Example
Query, Qry, or Q	Analytical query view	ZC_XXX_PurchaseOrder_Q
Cube or C	Analytical cube view	ZC_XXX_SalesData_C
Text, Txt, or T	Provider for language-dependent text	ZI_XXX_MaterialText_T
TP	Transactional processing view	ZC_XXX_FinanceJourEntries_TP
VH or StdVH	(Standard) value help view	ZI_XXX_Materials_VH or ZI_XXX_Materials_StdVH





# SAP CDS FIELD NAMING CONVENTIONS

- Uniformity and Avoidance of Ambiguity:
- Legibility by Using Camel Case: CostCenter
- Avoidance of Abbreviations like Ord instead use Order



# SAP CDS FIELD NAMING CONVENTIONS: NAMING STRUCTURE

- As a general rule, field names consist of up to 3 main elements:
- Example: SalesOrderConfirmationDate

Naming Element	Example	Explanation
<b>Object</b>	SalesOrder	Defines an object class in terms of things in the real world.
<b>Property</b>	Confirmation	A feature shared by the instances of an object class.
<b>Representation Term</b>	Date	Indicates the data type represented by the field.



# SAP CDS FIELD NAMING CONVENTIONS

## :REPRESENTATION TERM

Representation Term	Definition	Example Field Names
<b>Identifier</b>	A value identifying an instance	BankAccount, BankAccountUUID
<b>Code</b>	A value from a range of values	CorrespondenceLanguage, TransactionCurrency
<b>Indicator</b>	A boolean truth value	OrderIsReleased
<b>Amount</b>	A monetary amount	TaxAmount
<b>Date</b>	A calendar date	GoodsArrivalDate
<b>Time</b>	A specific time of day	ShiftDay   EndTime
<b>Date and Time</b>	A calendar date and time	CreationDateTime
<b>Quantity</b>	A countable or measurable amount	InspectedProductQuantity
<b>Text</b>	Textual information	GoodsLocationText
<b>Duration</b>	Duration between two points	ServiceWorkDuration



# SAP RAP BUSINESS SERVICES

## ➤ Service Definition:

- For UI Prefix: UI\_ (e.g., ZUI\_XXX\_CUSTOMER)
- Web API: Prefix:API\_ (e.g., ZAPI\_XXX\_CUSTOMER)

## ➤ Service Bindings:

- Web API V2: Prefix : \_API Suffix: \_O2 (e.g., ZAPI\_XX\_CUSTOMER\_O2)
- Web API V4: Prefix : \_API Suffix: \_O4 (e.g., ZAPI\_XX\_CUSTOMER\_O4)
- OData V2: Prefix : \_UI Suffix: \_O2 (e.g., ZUI\_XX\_CUSTOMER\_O2)
- OData V4: Prefix : \_UI Suffix: \_O4 (e.g., ZUI\_XX\_CUSTOMER\_O4)





# SAP RAP SOURCE CODE OBJECTS

- Behavior Pool: Prefix: BP\_ (e.g., ZBP\_XX\_CUSTOMER)
- Handler Class: Prefix: LHC\_ (e.g., ZLHC\_CUSTOMER)
- Saver Class: Prefix: LSC\_ (e.g., ZLSC\_CUSTOMER)
- Association Should start with \_CamelCase



# TECHNICAL CATALOGS AND BUSINESS CATALOGS

- Technical Catalogs: Format: ZTC\_<module ID>\_CUSTO
  - Example: ZTC\_XXX\_CUSTOM
- Business Catalogs: Format: Z<module ID>\_<BusinessProcess>
  - Example: ZXXX\_SCHEDULING



# SPACE AND PAGE CONFIGURATION

- Launchpad Space ID: Format: ZSP\_<module ID>\_<BusinessProcess>
  - Example: ZSP\_XXX\_Scheduling
- Launchpad Page ID: Format: ZPG\_<module ID>\_<BusinessProcess>
  - Example: ZPG\_XXX\_Scheduling



## KEY RECOMMENDATIONS

- Always maintain consistency in naming conventions.
- Use descriptive terms for better readability.
- Prefixes and suffixes should align with the purpose of the object.
- Adhere to SAP documentation for updates.





# Thank You for Watching!

## CONTACT

Ram Niwas

LinkedIn :-

<https://www.linkedin.com/in/ram-niwas-04/>

Git Hub :-

<https://github.com/ramniwas04>

YouTube :

<https://www.youtube.com/c/SAPTECHNOMANIAC>



**SUBSCRIBE**



**LIKE**



**COMMENT**

**SHARE**



**THANKS**



Like the video if it helped you.



Comment with your thoughts, questions, or suggestions.



Share to support others in learning SAP.



Subscribe and turn on notifications for more SAP content.



# Kickstarting Real-Time Projects with Your First CDS Using Released Artifacts



## SAP RAP REAL-TIME PROJECT

**Ram Niwas**

LinkedIn

[www.linkedin.com/in/ram-niwas-04](https://www.linkedin.com/in/ram-niwas-04)

YouTube :

<https://www.youtube.com/c/SAPTECHNOMANIAC>



# From Concept to Reality: Practical CDS Data Modeling in SAP



## SAP RAP REAL-TIME PROJECT

**Ram Niwas**

LinkedIn

[www.linkedin.com/in/ram-niwas-04](https://www.linkedin.com/in/ram-niwas-04)

YouTube :

<https://www.youtube.com/c/SAPTECHNOMANIAC>



# CDS Table Function: Real-World Example!



## SAP RAP REAL-TIME PROJECT

**Ram Niwas**

LinkedIn

[www.linkedin.com/in/ram-niwas-04](https://www.linkedin.com/in/ram-niwas-04)

YouTube :

<https://www.youtube.com/c/SAPTECHNOMANIAC>





S

Since **I\_ManufacturingOrderOperation** not released in current where we are working that is the reason we are getting these issue. I just want to show how you can use released CDS view.



# NAMING CONVENTIONS IN RAP

## ➤ Best Practices:

- Namespace Guidelines
- CDS Entities and Naming Patterns
- Behavior Definitions and Implementations

## ➤ Key Tip:

- Consistent naming improves maintainability and aligns with SAP standards.



# NAMING CONVENTIONS IN RAP

## ➤ Best Practices:

- Namespace Guidelines
- CDS Entities and Naming Patterns
- Behavior Definitions and Implementations

## ➤ Key Tip:

- Consistent naming improves maintainability and aligns with SAP standards.





# CDS TABLE FUNCTION

- What is it?
  - Definition and Usage in RAP.
- Why is it Needed?
  - Dynamic Data Retrieval
  - Complex Calculations.
- Example:
  - Briefly outline a simple table function query.



# VIRTUAL ELEMENTS IN CDS

- Introduction:
  - What are Virtual Elements?
  - Use cases in RAP applications.
- How it Works:
  - Data annotation to bind custom logic to the UI.
- Example:
  - Displaying computed fields like "Net Price" without persisting data.

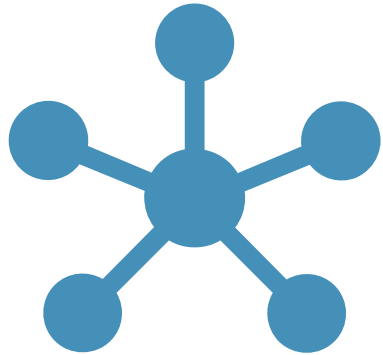


---

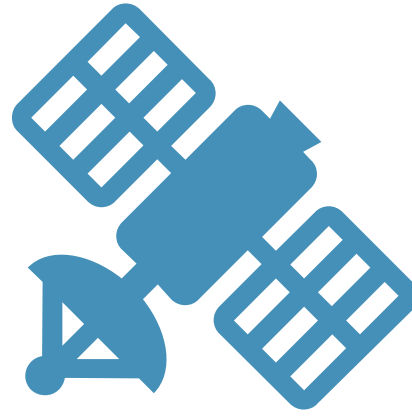
Here I have realized that I mistakenly used the term 'Production Order' instead of 'Process Order.' This is because I have mostly worked with Production Orders.

My apologies for the mix-up 😊

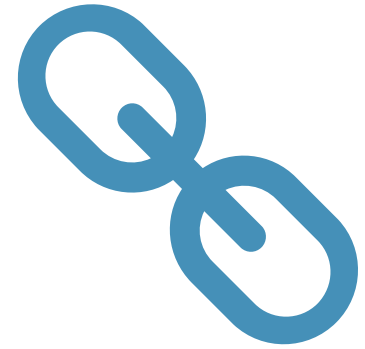




Network



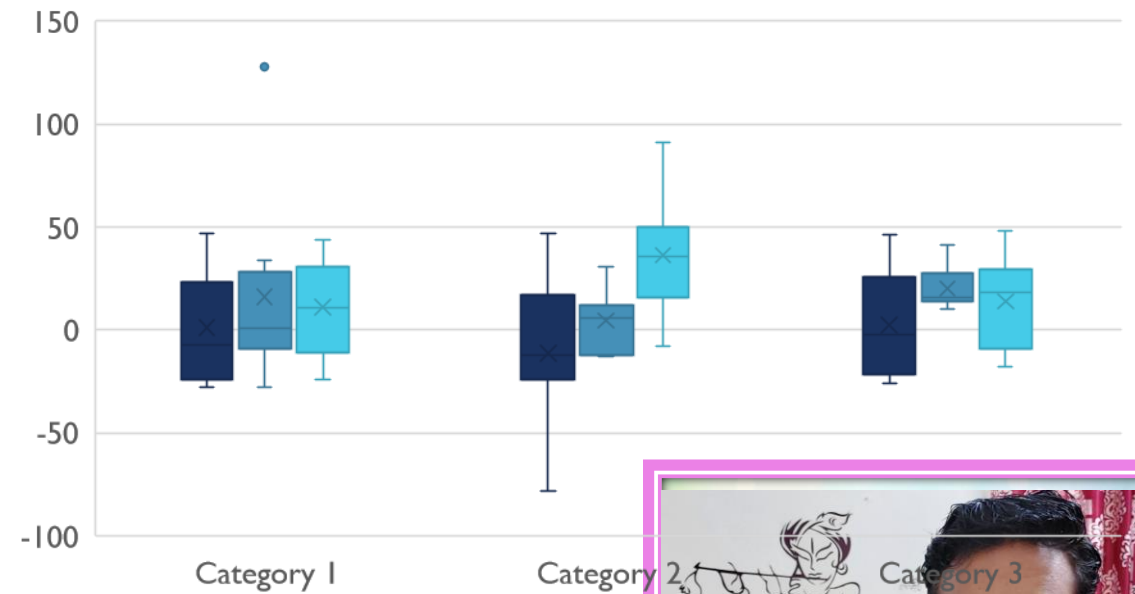
Satellite



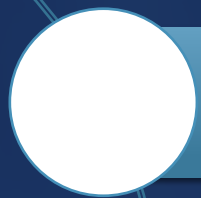
Link

TECH REQUIREMENTS

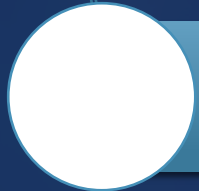
# COMPETITIVE LANDSCAPE



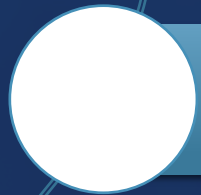
# DIGITAL COMMUNICATIONS



Cloud



Local



Hybrid





# THANK YOU

[SOMEONE@EXAMPLE.COM](mailto:SOMEONE@EXAMPLE.COM)