Microsoft POC of S/4 Group Reporting Consolidation on S/4 Central Finance

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About the Speakers

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- S/4 Finance Architect
- 21 years Global FI/CO
- 6 years @ Microsoft

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- S/4 Finance Engineer
- 16 years Global FI/CO
- 5 years @ Microsoft

Key Outcomes/Objectives

S/4 Group Reporting "Consolidation"

1. Overview

2. Core Capabilities & Scope

3. Adoption with S/4 Central Finance on Azure cloud

Agenda

- Finance Transformation

- S/4 Central Finance Foundation

- S/4 Group Reporting Consolidation POC

- Data Flow & Process Overview

- Lessons Learned EC-CS vs Group Reporting

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FINANCE TRANSFORMATION

Re-design opportunities

Finance Transformation Opportunity

Microsoft – Azure Finance Journey

- Large ECC Instance running on "classic GL" on Azure cloud
- Extensive ecosystem surrounding SAP to achieve business goals
- Best in class user experience & flexibility using Azure
- Complex mixed ETL, Data lake, BW environment
- Modern Finance Digital Transformation well underway leveraging Azure

Azure Cloud + S/4 HANA

- S/4 Central Finance POC complete (2018)
- S/4 Central Finance Implementation project in progress
- S/4 Group Reporting – POC in progress

Azure

SQL

ML

Bots

Excel

Power BI

Microsoft + SAP

Best in Class Microsoft Tools + Market Leading SAP ERP + Azure Cloud Services

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S/4 CENTRAL FINANCE FOUNDATION

CFIN Transaction base

What is Central Finance (CFIN)?
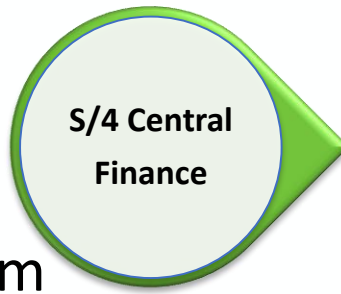
CFIN is an **S/4 implementation approach** – start with Finance modules only

- Multiple SAP systems replicate financial data real-time to a **CFIN S/4 HANA** system
- Non-disruptive side-car approach – runs in parallel to existing SAP systems
    - SLT – System Landscape Replication Server – real time replication of documents
    - MDG – Master Data Governance + AIF for error monitoring & correction
    - Business Mapping Rules – Transforming data when required to new S/4 Universal Journal

Same capability as any full S/4 HANA System

SAP ECC

SAP ECC

Other ERP

Real-time replication

Database triggers

S L T

MDG + Mapping Rules

AIF - Interface

SAP S/4HANA Central Finance
Universal Journal
ACDOCA - Actuals

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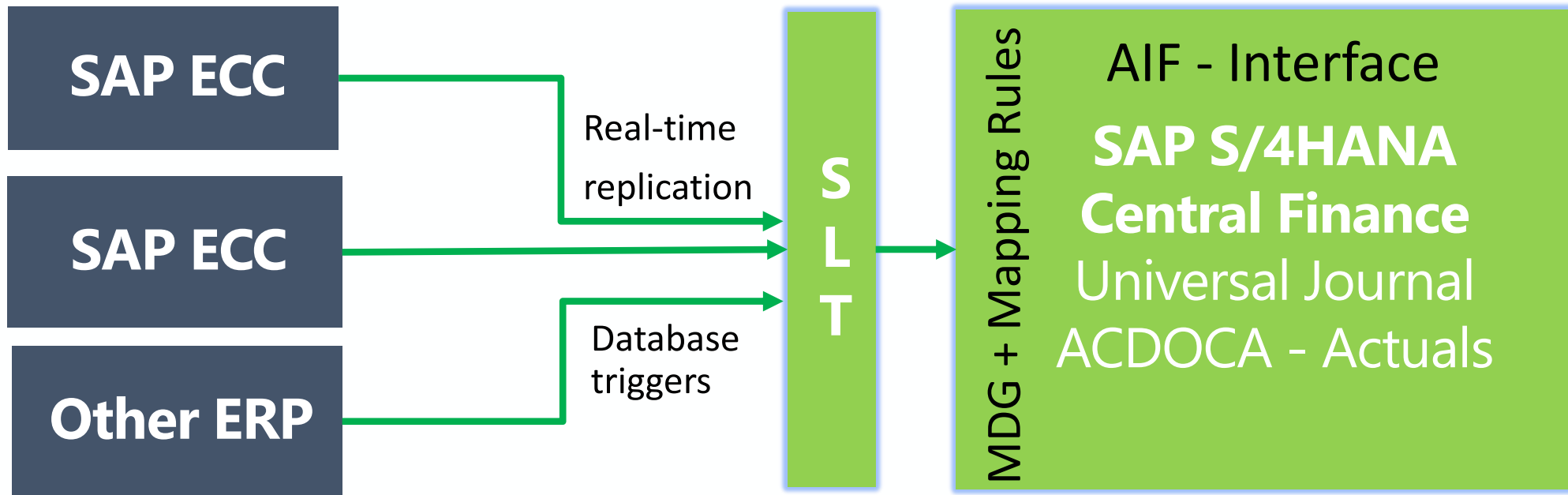
Azure cloud - what's in it for Finance?

Scale

- 440GB → 24TB RAM large instances

Cost

- Right-sizing lowers up-front system cost (OPEX vs CAPEX)
- Tight-sizing for close correlation of system sizes with service demands
- Ability to "snooze" systems during periods of non-use

Agility

- Enables quick creation of sand boxes

& proof of concept systems

- Allows on-demand infrastructure

IaaS - Flexibility for Cloud Systems
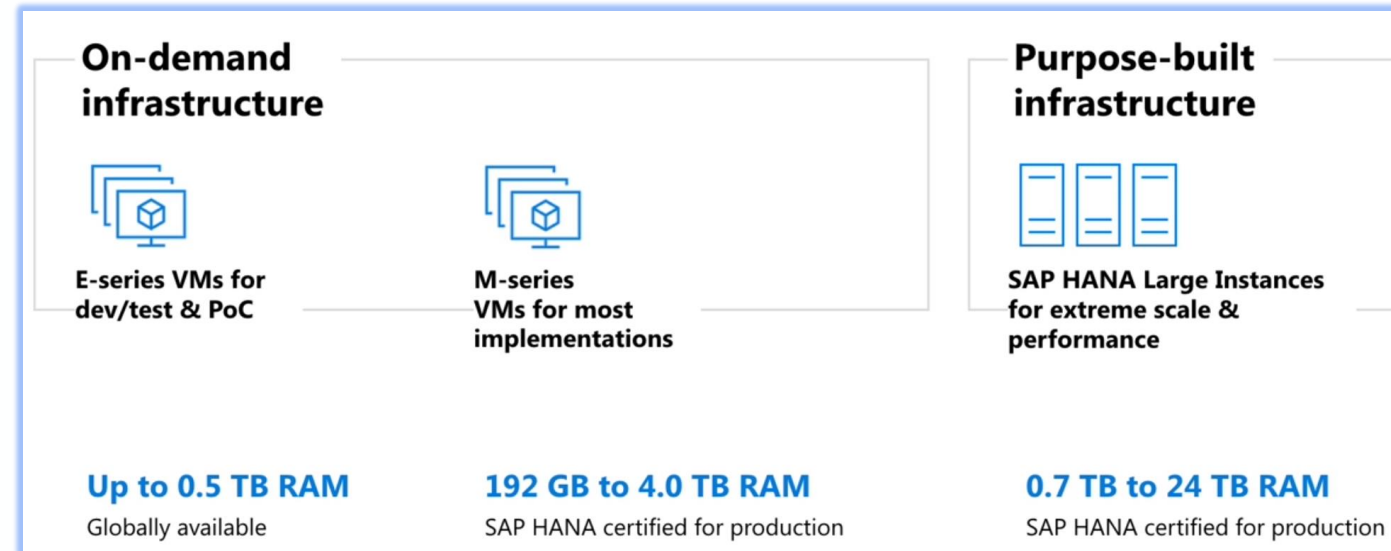
"BYOL"
Bring your own SAP license

On-demand infrastructure

E-series VMs for dev/test & PoC
Up to 0.5 TB RAM
Globally available

M-series VMs for most implementations
192 GB to 4.0 TB RAM
SAP HANA certified for production

Purpose-built infrastructure

SAP HANA Large Instances for extreme scale & performance
0.7 TB to 24 TB RAM
SAP HANA certified for production

S/4 "CFIN Foundation" for Group Reporting

Central Finance Updates the S/4 Universal Journal

- Provides a reconciled G/L foundation <u>before</u> performing financial consolidation
- EC-CS docs <u>do not</u> flow through CFIN
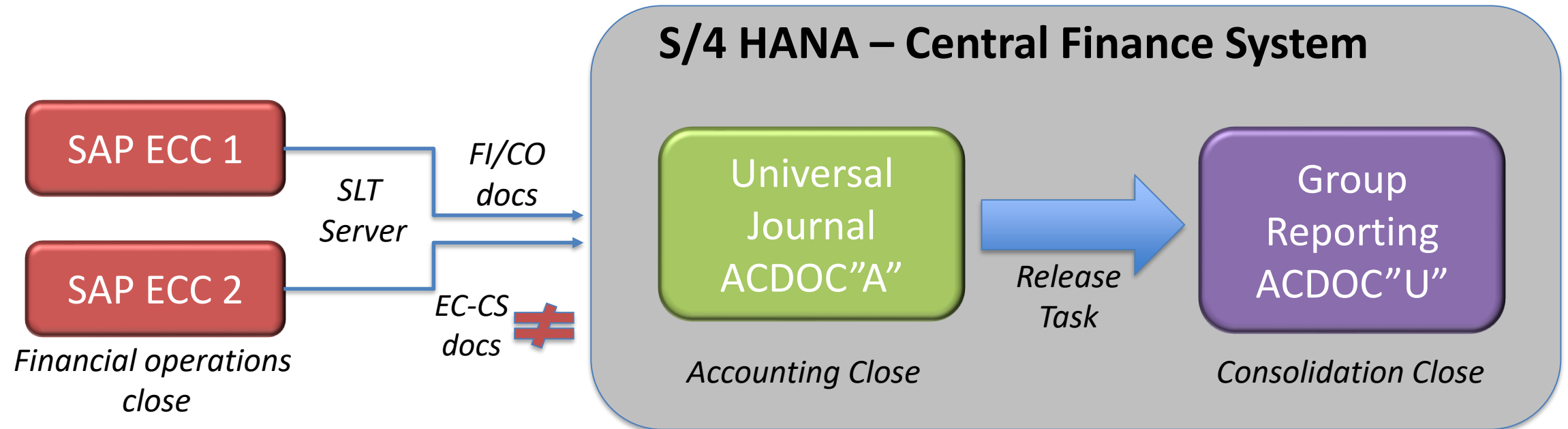
S/4 Group Reporting (aka Consolidation)

- Universal Journal = data source for integrated G/L actuals
- Data preparation & classification for financial consolidation
- Perform financial consolidation close activity

S/4 GROUP REPORTING

Implementation of Group Reporting

Start with a Proof of Concept

Goals – Technical POC to explore the new solution on Azure cloud

- Early knowledge ramp up for IT and corporate finance teams
- Compare & contrast with existing EC-CS consolidation module
- Incorporate correct design into the "CFIN solution" now
- Ensure Universal journal supports future consolidation needs
- Accelerator for a future S/4 financial consolidation project

New Configuration Node – 1809

- Similar data model to EC-CS

i.e.
- Cons Ledger
- Cons Units
- FS Items
- Subitem categories
- Breakdown categories

Structure
SAP S/4HANA for Group Reporting
Global Settings for Consolidation
Master Data
Define Consolidation Ledgers
Display Dimension
Define Versions
Create Version from Reference Version
Define Consolidation Chart of Accounts
Define Consolidation Master Data Fields
Maintain Organizational Unit Hierarchies
Define Subitem Categories and Subitems
Define Breakdown Categories
Define Default Values for Subassignments
Edit Number Range Intervals for Posting
Define Document Types for Reported Financial Data
Define Document Types for Manual Posting in Data Monitor
Define Document Types for Reclassification in Data Monitor
Define Document Types for Manual Posting in Consolidation Monitor
Define Document Types for Reclassification in Consolidation Monitor
Define Selections
Consolidation FS Items Configuration
Data Collection for Consolidation
Currency Translation for Consolidation
Reclassification
Configuration for Consolidation Processing
Plan Consolidation

Group Reporting Key Concepts

Consolidation Ledger
- Defines Group Reporting currency & valuation

**Consolidation Group** (group close)
- Group roll up of consolidation units

Consolidation Unit (local close)
- Reporting Unit / Legal Entity

Financial Statement Item (aka **FSitem**)
- **Group account** (basis for the Consolidation chart of accounts)
  - **Breakdown categories**
    - **Sub Item Category** (B/S transaction type or P&L Functional Area)
      - **Sub Items** (Consolidation Transaction Types "movements") drives translation, elimination & reporting logic
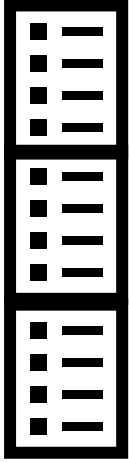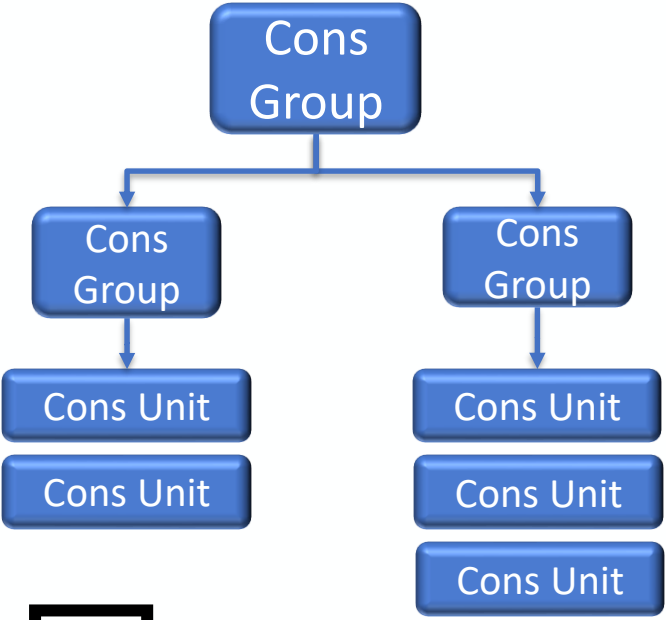
Consolidation
Chart of accounts
"FSitems"

Categorize transactions to drive consolidation activities

Define Consolidation Ledger

Change View "Global System Settings": Details

Undo Change | More ⌄ | Display | Exit

Cons. COA: 01 | **Version:** 1

Line Items in SAP S/4HANA

Starting Year for LIs in SAP S/4HANA: 2017

Settings for Configuration Control

- ☑ Reclassification: Seln Object in Trigger
- ☑ Online Entry: Line Items in SAP S/4HANA
- ☑ Validation in SAP S/4HANA
- ☑ Breakdown Category: Sel.Obj. in Max.Sel.
- ☑ Currency translation: Sel. object in method

Display Ledger: Master Data

Export ledger... | More ⌄ | Exit

Ledger: C1 | Company Legal cons ledger

Basic Settings

Reference Ledger: 0L

e.g. Group Currency = 30

Stored Currencies

Ledger currency: USD

Group Reporting Master Data

- Create Consolidation Chart of Accounts (top node)

Step 1
- Create "**FSitems**" + related attributes
  - Assign Breakdown categories
  - Elimination & Translation attributes

Step 2
- Map "**FSitems**" to Operational G/L accounts

Fiori App Import templates with Excel

Import Master Data for Consolidation Fields

Download Template

Selection

Master Data Type Selection: - All Master Data Types -

Data Selection: - All Master Data Types -

Financial Statement Item

Financial Statement Item Mapping

Download   Cancel

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Step 1 – Import FSitems from Excel Template

Import Master Data for Consolidation Fields

Display FSitem + Breakdown Category

- FSitem detail display

Step 2 – Map FSitems to G/L accounts

- Map Operational Chart of Accounts to Group Chart of Accounts

Import Master Data for Consolidation Fields

Validation Rules i.e. A = L+E

Define Validation Rules | Define Validation Methods | Assign Validation Methods

Define Validation Rules then assign to a Cons Unit

Assign Validation Rule to a Validation Method
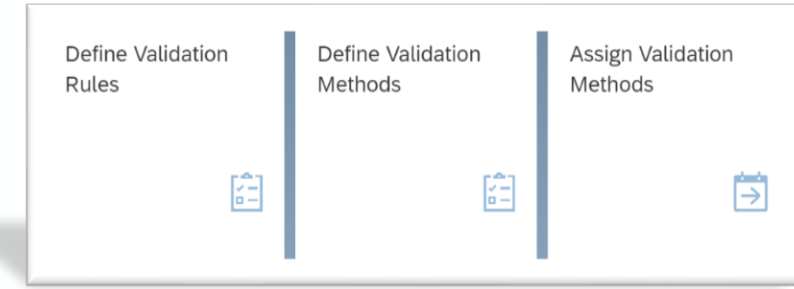
General Information | Rule Expression | Reference Links

*Rule ID (10 Characters)
Z001

*Short Description (40 Characters)
Assets = Liability + Equity

*Long Description (120 Characters)
Assets = Liability + Equity

Group By:

Tolerance:
0.00 | | ○ And ◉ Or | 0.00 | %

Rule Expression

Left Formula | f(x) ▽ | Backspace

ASSETS

LCBAL Balance Sheet Sums to Zero in LC [Edit] Set to Inactive

Status: Active Created By:
Created At:

Rule Groups

Add Group | Assign Rules | Delete | ↓≡

☐	Name	Description	Status
☐	˅ Totals Validation		
☐	˅ MSGROUP	MS Group Validations	
☐	Z001	Assets = Liability + Equity	Active

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Consolidation Groups + Units Hierarchy

- Establish a hierarchy to manage the consolidation activity

Cons Ledger Config

FSitem Master Data + rules

Cons Groups & Unit

Source data

DATA FLOW & PROCESS OVERVIEW

Implementation of Group Reporting

High Level Consolidation Process

G/L Operational Close
ECC systems + S/4 CFIN

"Cons Unit Tasks"

Data Release + prep

"Cons Group Tasks"
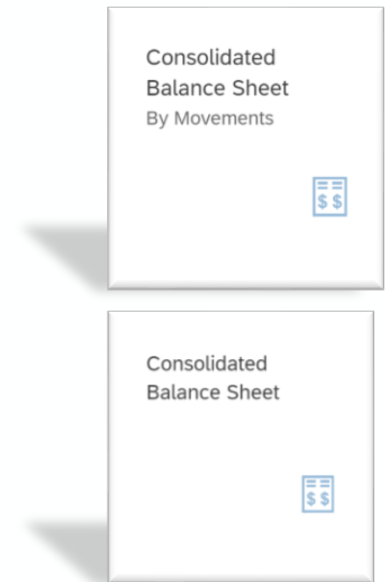
Consolidate

Group Reports

Data Monitor (CXCD)
- Balance Carry Forward
- Release from Universal Journal
- Validation of "FSitems" structure
- Post Manual Entries
- Post Retained Earnings
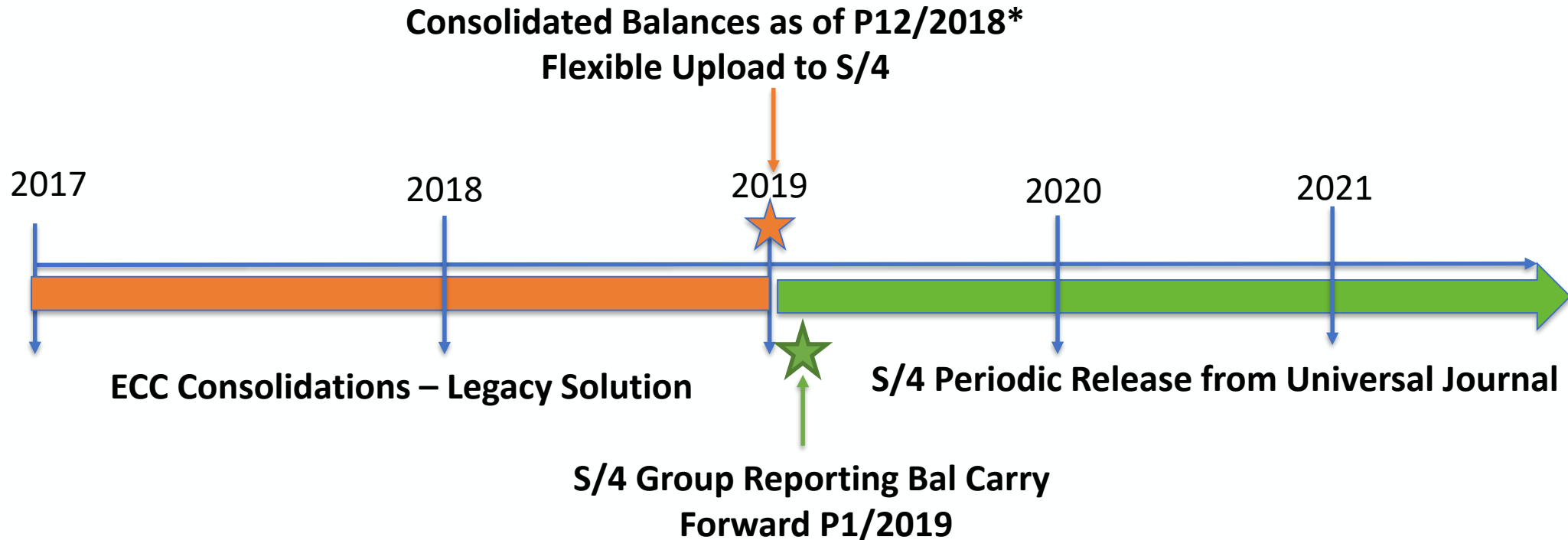- Perform Currency Translation

Consolidation Monitor (CX20)
- Inter Unit Eliminations
- Manual Eliminations
- Equity Consolidations
- Validation of Consolidated data
- Integrate in Consolidation Group

Consolidated Balance Sheet By Movements

$ $

Consolidated Balance Sheet

$ $

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Opening Balance Cutover Approach

Opening Balances (BCF)→ Release task from ACDOCA to ACDOCU

Consolidated Balances as of P12/2018*
Flexible Upload to S/4

2017   2018   2019   2020   2021

ECC Consolidations – Legacy Solution

S/4 Periodic Release from Universal Journal

S/4 Group Reporting Bal Carry Forward P1/2019

*Assuming period frequency is 12 months in each fiscal year

Data Monitor - "cons unit tasks" i.e. data release, cur trans.

Transaction code - CXCD

Release from Universal Journal Task

"Imports data" from
ACDOCA to **ACDOCU**
– no ETL required

- **Timestamp "release of data"** – controls the flow to avoid a moving target for consolidation

- **Reported Financial Data** (difference)   = preview of Totals data with delta values
- **Data from Prior Period (**without Release) **=** previous period data not yet loaded

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Reported Financial Data (release task ACDOCA→ACDOCU)

Search in Table: ACDOCU | SAP Universal Consolidation Journal Entries

Number of hits: 2

Runtime: 0 | Maximum no. of hits | 500

	Ld	DI	Year	DocumentNo	LnItm	R	Ver	Period	D	Co.	Cons unit	CA	FS Item	Partn	Cons. Grou	OrCC	S	Subitem	DT	TC Amou	Crcy	LC Amou	LC	Amnt in GC	LC	Quantit	Te	A	T
	C	Y1	2019	U001000001	016583	U	1		1	A		10							XC		600.00-	SGD	434.12-	USD	434.12	USD				
	C1	Y1	2019	U001000001	016584	U	1		1	A		1076	01	742008		1076			XC		600.00	SGD	434.12	USD	434.12	USD				

Search in Table: ACDOCA | Universal Journal Entry Line Items

Number of hits: 2

Runtime: 0 | Maximum no. of hits | 500

	Ld	CoCode	Year	DocumentN	LnItm	GLF	DocNoLD	BusTranTyp	Ref. proc.	Log.Syste	Ref.org.un	Ref. doc.	Ref.It	Amt in BT	BTCrcy	Amnt in T	TrCrcy	Amnt in C	CCCrcy	Amnt in GC	Glob Crc	AmntCrcy1	Free Crcy1
	0LD	1076	2019	100000000	000001	2019		RFBU	BKPF		10762019	10000000	1	600.00-	SGD	600.00-	SGD	434.12-	USD	434.12-	USD		
	0L	1076	2019	100000000	000002	2019		RFBU	BKPF		10762019	10000000	2	600.00	SGD	600.00	SGD	434.12	USD	434.12	USD		

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Currency Translation Task

- Translate Local Currency to Group Currency
- Fiori App to analyze posted differences by FSitem

Consolidation Monitor – "cons group tasks" e.g. I/C elimination

Tasks are executed at consolidation "**Group level**" only e.g.
- Interunit Elimination of Intercompany AR & AP
- Integrate Data to Cons Group Reports

Transaction code – CX20

| | | | Consolidation Monitor |

Test run   Update Run   Run Successive Tasks   Global Parameters   Block   Unlock Subtree   Unblo

Cons. COA: 01   Version: 1   Period: 1 / 2019

Only Cons Group

Tasks

Hierarchy	Description	Overall status	◆ManConsEnt	IC AR & AP	Int.Congrp
☑ ∨ 🖼 Y1	Companies for legal consol.				
☐ ∨ ♟ AA	Top Hierarchy Node				
☐ ∨ 🗂 TOP	Top Node	☀	⊗	⊗	▲
☐ 📁 ALL	Microsoft Corp. Consolidation	☀	⊗	⊗	▲

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Interunit Eliminations Task

- "Reclassification Tasks" in S/4 Group Reporting

Trigger – Selection criteria
i.e. FSitems
= I/C Recon a/c's

- **Source –** Where should the offset be posted
- **Destination –** Where does the entry/balance need to post to

Integrated Consolidation Group Task

- Moves the reported data + cons entries into the Consolidation groups.
- Identifier = Record Type **"R"** **Totals**
- Without executing this task, the "Cons Group Reports" will not return results

Proof of Concept Status

- S/4 Central Finance set up for a selection of company codes
- Configured S/4 Group reporting for the same company codes
- Release data from Universal Journal (ACDOCA) to Group Reporting (ACDOCU)
- Perform basic reconciliation tasks & reporting scenarios as a Poof of Concept
- All running on Azure cloud infrastructure

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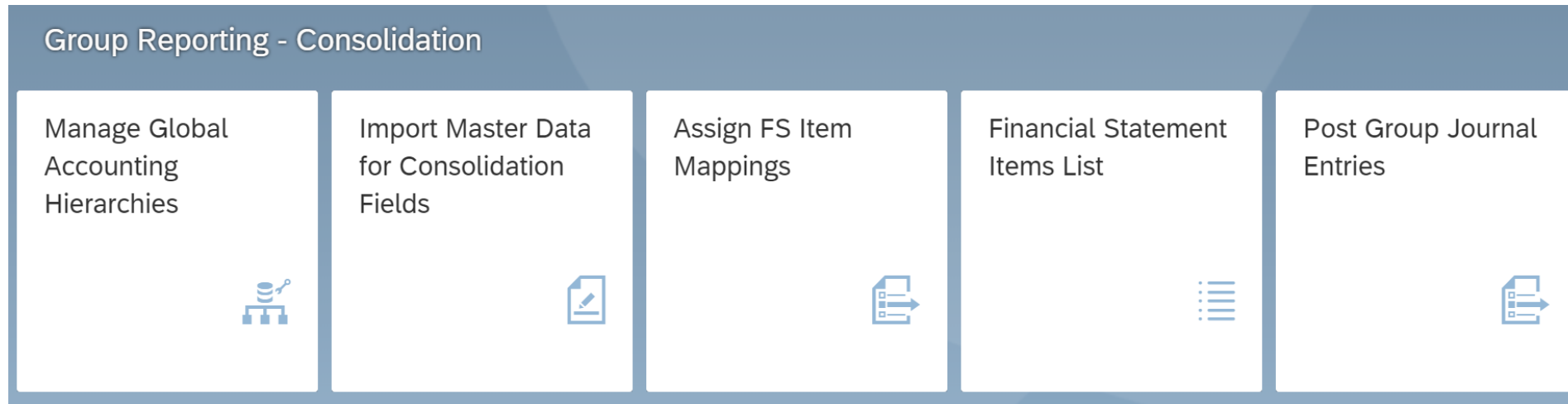
REPORTING

Reporting Overview

Reporting – Global Hierarchies

Consolidated Balance Sheet

- Reporting Hierarchy of FSitems drives structure

Consolidation Reporting – by Movements

- Subitems/Transaction Types classify "movements" – open, additions etc.

Balance Sheet: Fiori + Excel share the same S/4 Odata service

Fiori

Excel

LESSONS LEARNED ON S/4
+ EC-CS VS GROUP REPORTING

Compare EC-CS vs Group Reporting

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Lessons Learned

- ## Universal Journal is the source for Group Reporting Ledger
  - Release of ACDOCA data to ACDOCU (not real-time) – allows a freeze period

- ## FSitems
  - Maintained & tagged via Fiori Apps and Excel Upload

- ## Profit Center & Segment
  - Available as dimensions in consolidation, but not custom fields at this stage

- ## Data & Consolidation monitor
  - Re-used from EC-CS/SAP GUI – also accessible via Fiori App

- ## Fiori UI Reporting Suite – fast performance on Azure
  - Balances, Line Items, drill-down & formatted reports more detail + flexibility

Import Master Data for Consolidation Fields

Financial Statement Items List

Assign FS Item Mappings

Consolidated Balance Sheet By Movements

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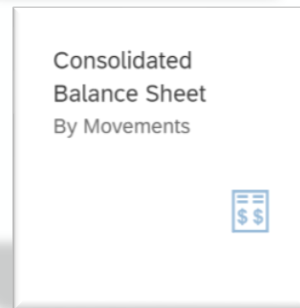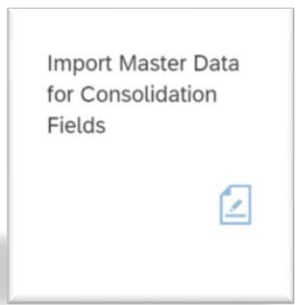
Lessons Learned

Eliminations

- Business rules are attached to FSitems more efficient than EC-CS to reduce customizing
- Similar to BPC using account attributes + master data - i.e. I/C AP & AR, I/C Rev & COGS

Rule Based Reporting + Global Hierarchies

- Reporting items concept is flexible + drill down to source documents

Predefined Dimensions can be used like EC-CS

- No additional "BW data modelling" required like BPC
- Simple configuration activity to add additional dimensions

Challenges

- **No auto migration** from EC-CS to S/4 Group Reporting – use Flexible Upload for open balances
- **Ledger Currencies Types** limited to 3 i.e. TC, LC & Group vs Universal Journal
- **Currency** - additional currency views require additional Ledgers & duplicate data
- **Restatements -** require a full copy of data as a separate version & re-consolidating

RESOURCES

S/4 on Azure Cloud

https://www.sap.com/dmc/exp/2014-09-02-hana-hardware/enEN/iaas.html#categories=Microsoft%20Azure

Useful Transaction Codes

- **CX8S4H** – Consolidation System Status "Activation"
- **CXE9N** – Group Reporting IMG Node
- **CXGP** – Set Global Parameters
- **CXCD** – Data Monitor
- **CX20** – Consolidation Monitor
- Other Useful Transaction codes also start with **FINCS***
  - **FINCS_SELECTION** - Define selections
  - **FINCS_ADDLFLD_SEL_A** – Additional consolidation master data fields

Tables to Know

- **FINCS*** Tables drive group reporting
  - **FINCS_FSITEM** – Financial statement item
  - **FINCS_FSIMAPITM** – assignment of GL a/c to FSitem

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Q&A

For questions after this session, contact us at
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