

Planning and Configuring the Chart of Accounts Part 5: Patterns and Anti- Patterns

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Objectives of this TechTalk

1. Review patterns and anti-patterns for main account and financial dimension configuration.
2. Review patterns and anti-patterns for account structures and advanced rules.
3. Review patterns and anti-patterns for legal entity and organizational structures.

What it doesn't cover

1. Something

Agenda:

1. Main Accounts and Financial Dimension
2. Account Structures and Advanced Rules
3. Legal Entity and Organizational Structure
4. Checklist and Resources

SCENARIO:

Contoso Appliances sells a variety of services in addition to the appliances and parts. In total Contoso Appliances currently sells around 50,000 appliances and parts for the appliances. Additional, about 70 services are offered which need to be tracked in detail in the general ledger. The physical items are not tracked at a detail level in the general ledger, only the service items. The item detail will be tracked by using a financial dimension for the item.

PATTERN: Use custom dimensions

- Define a custom dimension that has the 70 service items that need to be tracked in detail.
- Select the custom dimension value on the 70 service items linking them to the equivalent financial dimension.

ANTI-PATTERNS:

- DO NOT use an entity backed financial dimension for large or volatile data sets.
- DO NOT use a single financial dimension for multiple purposes.

SCENARIO:

The customer has a requirement to automatically select a department and cost center value when a specific main account and project dimension combination is used. The department and cost center dimensions are backed by the operating units and the project dimension is a custom dimension.

PATTERN: Use derived financial dimensions

- Automatically select additional financial dimensions with specific combinations of other dimensions.
- Legal entity specific dimensions cannot have derived dimensions.
- An extension would be required if the dimension is legal entity specific. Consider the best location for the extension in the following order:
 1. Table buffer modifiedField events on LedgerJournalTrans directly.
 2. Form data source modifiedField events on LedgerJournalTransDaily.
 3. Form control events on the separate fields that are tied to specific control interactions on the form; but not anywhere else on the form that could also update the data.
 4. New DimensionEntryController "-er" class deriving from an existing one, then change the control type at design time on the LedgerJournalTransDaily

ANTI-PATTERNS:

- DO NOT extend the DimensionEntryContol class OnModifyDimensionValue() method.



DEVELOPERS

They think more typing is always the answer.

SCENARIO:

Contoso Appliances has three financial dimension: Business Unit, Departments, and Cost Centers. The values for the Cost Center dimension contain a set of values that are three digits and represent cost centers. The list of values for the dimension also contain a set of values that are four digits and represent marketing purposes.

PATTERN: Each dimension defines one attribute

- Use a separate financial dimension for each different attribute that needs to be tracked in the General ledger.
- Use Group dimension to combine financial dimensions for consolidation purposes.
- Use Row and Column definitions to meet complex reporting requirements.
- Use the Organization hierarchy to define the relationship between two dimensions.
- Use the same formatting across all values within the same dimension.
- Use derived dimensions to build intelligent defaulting based on another dimension value.

ANTI-PATTERNS:

- DO NOT use a single dimension for multiple purposes.
- DO NOT use an entity backed financial dimension when a small portion of the source data is needed.



CONSULTANTS

They think more typing is always the answer.

SCENARIO:

Contoso Appliances is migrating their financial system to Dynamics 365 Finance. The team is happy with the current chart of accounts which has more than 10,000 main accounts. When analyzing the accounts, it was noticed that there are many main accounts setup for tracking revenue, COGS, and expenses that related to Product Line, Brand, and Department. Financial dimensions are planned for Business Units and Cost Centers.

PATTERN: Use financial dimensions to segment accounts and limit the total number of main accounts

- When there are multiple main accounts for the same transaction type, but each one is separated by an attribute, consider using a financial dimension and use only main account for the transaction type.
- Use the deployment of Dynamics 365 Finance as an opportunity to clean up and make improvements to your chart of accounts design.
- Structure your chart of accounts in a way that supports the financial architecture of Dynamics 365 Finance.
- Use financial dimensions to further describe a transaction.

ANTI-PATTERNS:

- DO NOT keep the chart of accounts from the legacy system for the sake of avoiding changes and mappings.
- DO NOT use text or number qualifiers in main account numbers to define attributes for a transaction.



ACCOUNTANTS

They think more typing is always the answer.

SCENARIO:

Contoso Appliances is using the project module to track internal and external projects. The chart of accounts has a total of 18 financial dimension. Five of these dimensions are used for all project related transactions and track details such as types of hours, types of expenses, billable status of transactions, and which project and project group the transaction relates to.

PATTERN: Use the project subledger

- The subledgers in each module in Dynamics 365 Finance and Supply Chain Management are designed to give detailed operational and transactional reporting.
- Data in the subledger should not be replicated into the general ledger unless there is a requirements for financial statements such as the income statement with that level of detail.
- Consider the user experience and defaulting rules when adding dimensions for transactions that flow through the subledger and consider how non-subledger transactions through journals, for example, will be handled.

ANTI-PATTERNS:

- DO NOT use financial dimensions for data that can be obtained from the subledger.
- DO NOT use financial dimensions to meet operational reporting requirements.

SCENARIO:

Contoso Appliances has created a financial dimension for customers. Currently Contoso Appliances has around 60,000 customers and expects to add around 1-5 thousand additional customers each year. There are requirements to report on the revenue by customer.

PATTERN: Use the customer subledger

Using financial dimensions for very large data sets can cause performance issues. The architecture of financial dimensions is not designed to handle very large and volatile data sets.

Instead, use subledger reporting to meet the requirements. For this example, customer revenue data can be pulled from the data related to the sales line and customer data. Analyze the out-of-the box entities to see if they can meet the requirements.

- Consider creating new data entities that normalize the data needed for reporting if detailed reporting is required.
- Consider creating new aggregated entities for the data when summarized data is required for reporting.

ANTI-PATTERNS:

- DO NOT create financial dimensions with a very large number of values.
- DO NOT create financial dimensions where the values are degenerate, and reuse is low because each value only has a few transactions.

Agenda:

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1. Main Accounts and Financial Dimension
 2. Account Structures and Advanced Rules
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SCENARIO:

Contoso Appliances has created an account structure for the profit and loss accounts. In the account structure there is one row for each main account in the chart of accounts. The cells for each row define the allowed financial dimensions for that main account.

PATTERN: Use main account ranges for account structures

- Group main accounts in number ranges that have similar behavior.
 - Use "is between and includes" (###..###)
 - Use "begins with" (###*)
- Select multiple main accounts on a single row by using a semicolon.
- Leave room for growth in your account numbering.

ANTI-PATTERNS:

- Use more than 7 values on a single cell.
- Create one row for every main account.
- Limit the configuration to only include actual account numbers (use ranges instead).
- Use the "is" filter criteria when possible.

Anti-Pattern: One Row Per Account → Pattern: Group Accounts

The image displays two side-by-side screenshots of the Microsoft Dynamics 365 Finance and Operations interface, illustrating a transition from an anti-pattern to a better pattern for account management.

Left Screenshot: One Row Per Account

This view shows a table with columns: MainAccount, BusinessUnit, CostCenter, Department, and Active. The table lists individual accounts, with blue chevrons indicating that multiple rows share the same BusinessUnit and Department. A 'Duplicate' button is highlighted in the 'Segments and allowed values' section.

MainAccount	BusinessUnit	CostCenter	Department	Active
401100	*	*	*	
401200	*	*	*	
401300	*	*	*	
401400	*	*	*	
402100	001..100	*	*	
402200	001..100	*	*	
402300	001..100	*	*	
402400	101..199	*	*	
402500	101..199	*	*	
402600	101..199	*	*	

Right Screenshot: Group by account number

This view shows a table with columns: MainAccount, BusinessUnit, CostCenter, Department, Active from, and Active to. The table lists account ranges, with blue chevrons indicating that multiple rows share the same BusinessUnit and Department. A 'Duplicate' button is highlighted in the 'Segments and allowed values' section.

MainAccount	BusinessUnit	CostCenter	Department	Active from	Active to
401100..401999	*	*	*		
402100..402399	001..100	*	*		
402400..402699	101..199	*	*		

Arrows indicate the mapping from the 'One Row Per Account' view to the 'Group by account number' view, showing how individual accounts are consolidated into ranges.

SCENARIO:

Contoso appliances has created an account structure with Business units, Cost centers, and Departments. There is one row in the account structure set to allow all values on all the dimensions. An advanced rule has been created for each main account to define the dimensions that are allowed for the main account.

PATTERN: Use main account ranges for advanced rule

- Use the account structure to define the “general rule” for the main accounts. In other words, most of your account combinations should be in the account structure.
- When using advanced rules, if the same combinations apply to multiple accounts, or segments, then use a range on the advanced rule.

ANTI-PATTERNS:

- Create one advanced rule for each main account.
- Create more advanced rules than rows in your account structure.

Anti-Pattern: One Advanced Rule per Main Account → Pattern: Group Accounts for Criteria

The image illustrates a transition from an anti-pattern to a pattern in SAP Finance and Operations account structure management.

Top Left Screenshot: Shows the 'Account structures' page with the title 'One Row with many Advanced Rules'. It displays a table of segments and allowed values.

Segment	Allowed values
MainAccount	400000..*
BusinessUnit	*
CostCenter	*
Department	*

Top Right Screenshot: Shows the 'Advanced rules' page. A red box highlights the 'Advanced rule criteria' section, which contains the following criteria:

- Where: MainAccount
- Operator: is between and includes
- Value: 401000
- through: 401999

Bottom Left Screenshot: Shows the 'Advanced rules' page with a blue arrow pointing from the 'Advanced rule criteria' section of the top right screenshot to the 'Advanced rule criteria' section of this screenshot. The criteria section is empty, indicating a transition to a pattern where multiple accounts are grouped for criteria.

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SCENARIO:

Contoso US recently was acquired by another company based in Europe and needs to start reporting their financials to the new parent company in Euros. The company has setup the Accounting and Reporting currencies as USD.

PATTERN: Create a new legal entity

It is not possible to change the accounting or reporting currency of a legal entity in the Ledger form after any transactions exist. Instead, a new legal entity should be created, and the currencies set prior to transferring opening balances. The recommended high-level steps are as follows:

1. Create a new legal entity. Consider using the copy company feature to copy your configurations.
2. Configure the Ledger with the correct currencies.
3. Perform a period close in the old company
4. Create journal entries to transfer the balances from the old company to the new company.
5. Start operating in the new company.

ANTI-PATTERNS:

- Create a support ticket to request a change to the accounting or reporting currency.
- Write scripts to attempt to update the values.

SCENARIO:

Contoso Appliances was recently merged with a competitor. The new company needs to report financials in according to the new organization's business requirements. This includes a new chart of accounts, new financial dimensions, and a new fiscal calendar.

PATTERN: Close out the legal entity

- Divide the period (if required)
- Post, delete, or migrate open documents
- Run any required consolidations and year and close
- Make any required adjusting journal entries (bring balances to zero if required)
- Put the periods (current and future) on hold
- Suspend dimensions and main accounts and remove user security
- Create a new legal entity, chart, dimension, and configure the ledger
- Create journal entries to transfer the beginning balances

ANTI-PATTERNS:

- Permanently close periods unless there is a legal requirement to do so.
- Go-live on a new company without first testing all critical business processes.

SCENARIO:

Contoso Appliances is a global organization with legal entities in Mexico, Germany, and France among other countries. These countries each have Statutory reporting requirements and financials must be reported in a specific format. Contoso uses a global chart of accounts for all internal reporting requirements.

PATTERN: Consolidation groups and additional consolidation accounts

- Create one consolidation company for each statutory reporting requirement/government agency.
- Create one consolidation account group for each statutory reporting requirement/government agency.
- Define additional consolidation accounts for each main account mapping from the global chart of accounts to the requirements for each statutory reporting requirement/government agency.
- Run the consolidation process to transform the data into the correct format.

ANTI-PATTERNS:

- Use account translations to meet statutory/reporting requirements.
- Write custom SSRS reports to transform and meet statutory reporting requirements.

Setting Up Additional Consolidation Accounts and Using Them During Online Consolidation

Finance and

Cont

Su Mo

6 7

13 14

20 21

27 28

Work iter

Cash adva

Expense re

Catalog : c

Expense re

Consolidate [Online]

Criteria

Financial dimensions

Legal entities

Elimination

Currency translation

Run in the background

Description

MAIN ACCOUNT

From:

To:

Use consolidation account:

☒ Yes

Select consolidation account from

Consolidation account group

Consolidation account group

German

CONSOLIDATION PERIOD

From:

To:

Include actual amounts

☐ No

Include budget amounts

☐ No

Rebuild balances during consolidati...

☒ Yes

BUDGET MODELS

From:

To:

Budget rate type

OK

Cancel

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RECAP

Your checklist for
the chart of
accounts and
ledger

Use and adjust this baseline checklist

- ✓ Create Main account templates
- ✓ [Create Main account categories](#)
- ✓ [Create Exchange rate types](#)
- ✓ [Define Sales tax groups and Item sales tax groups](#)
- ✓ [Define Sales tax codes](#)
- ✓ [Define the Chart of accounts](#)
- ✓ [Create Main accounts](#)
- ✓ Define Legal entity overrides on Main accounts
- ✓ [Create Financial dimension](#)
- ✓ Define values for financial dimensions
- ✓ Define default and fixed dimensions on main accounts
- ✓ Create Financial dimension sets
- ✓ [Configure Financial dimensions sets to update periodically](#)
- ✓ [Create Financial dimension default templates](#)
- ✓ [Create Ledger account aliases](#)

RECAP

Your checklist for
the chart of
accounts and
ledger continued

Use and adjust this baseline checklist

- ✓ Create a [Fiscal calendar](#)
- ✓ Create an [Organization hierarchy](#)
- ✓ Create an [Account structure](#)
- ✓ Create a relationship from the Organization hierarchy to the Account structure
- ✓ Create an [Advanced rule](#)
- ✓ Activate Advanced rules
- ✓ [Activate Account structures](#)
- ✓ [Configure the Ledger](#)

Resources



[GENERAL LEDGER DOCS](#)



[FINANCE LEARNING
CATALOG](#)



QUESTIONS

Dankie

Faleminderit

Shukran

Chnorakaloutioun

Hvala

Blagodaria

Děkuji

Tak

Dank u

Tānan

Kiitos

Merci

Danke

Ευχαριστώ

A dank

Mahalo

ἰδιῶ.

Dhanyavād

Köszönöm

Takk

Terima kasih

Grazie

Grazzi

Thank you!

감사합니다

Paldies

Choukrane

Aċiū

Благодарам

ありがとうございました

谢谢

Баярлалаа

Dziękuję

Obrigado

Mulțumesc

Спасибо

Ngiyabonga

Ďakujem

Tack

Nandri

Kop khun

Teşekkür ederim

Дякую

Хвала

Diolch