ESPRESSO TUTORIALS

Kees van Westerop

New Fixed Asset Accounting in SAP® S/4HANA

- Describes SAP Fixed Asset Accounting functionality in SAP S/4HANA with SAP Fiori examples
- Explores the complete lifecycle of an asset in SAP
- Identifies differences between classic Fixed Asset Accounting and the new SAP S/4HANA Fixed Asset Accounting
- Examines how Fixed Asset Accounting is integrated with other SAP modules

Table of Contents

Introduction **7**

1 New Asset Accounting in S/4HANA **11**
1.1 History 11
1.2 Main changes to Asset Accounting 12
1.3 New data model 13

2 Asset master data **17**
2.1 Organizational structure 18
2.2 Integration in the general ledger 26
2.3 Creating an asset master within Asset Accounting 30
2.4 Creating the asset master when entering purchase orders 50
2.5 Creating the asset master in internal orders/WBS elements 51
2.6 Maintaining asset master data 54
2.7 Conclusion 65

3 Acquisition and production **67**
3.1 Acquisition using an offset account 67
3.2 Acquisition integrated within Purchasing 69
3.3 Building assets under construction using Controlling objects 75
3.4 Integrated acquisition using Investment Management 81
3.5 Capitalizing assets under construction 83
3.6 Transferring assets 86
3.7 Creating assets based on down payments 93
3.8 Miscellaneous acquisition transactions 96
3.9 Asset Accounting documents 103
3.10 Conclusion 106

4 Depreciation and other periodic processes **107**
4.1 Depreciation keys 107
4.2 Depreciation control in the asset master 113
4.3 The depreciation process 117
4.4 Depreciation posting in the general ledger 123

4.5 Calculating the depreciation amount 125
4.6 Interest 129
4.7 Periodic processes 134
4.8 Conclusion 136

5 Other asset transactions 137
5.1 Value adjustments 137
5.2 Sale of an asset with a customer 148
5.3 Sale of an asset without a customer 153
5.4 Scrapping assets 156
5.5 Conclusion 157

6 Integration with other SAP modules 159
6.1 Integration with Controlling 159
6.2 Integration with Plant Maintenance 176
6.3 Real estate 179
6.4 Consolidation 181
6.5 Conclusion 182

7 Period-end processing and reporting 183
7.1 Reporting 183
7.2 Conclusion 195

8 Migration to new Asset Accounting 197
8.1 Migration prerequisites 197
8.2 Migration from an existing SAP system 198
8.3 Data migration from a legacy system 202
8.4 Central Finance 204
8.5 Conclusion 205

A The Author 208

B Index 209

C Disclaimer 212

2 Asset master data

Using SAP Asset Accounting correctly starts with creating asset master data correctly. Although this sounds very simple, in reality it is quite a complex task. This is because Asset Accounting must fulfil all kinds of different requirements simultaneously.

Requirements can be:

- Reporting: It must be possible to report according to accounting principles such as IFRS, local GAAP, tax, and group reporting. This must all be possible simultaneously.
- Type of assets: A distinction must be made between different types of assets—low-value assets, leased assets, machinery, buildings, etc. Furthermore, reporting should be possible for each type of asset.
- Depreciation: Several methods for calculating depreciation may be required. The depreciation method depends on the accounting principles applied: for example, straight-line depreciation, declining balance, percentage of useful life, etc.
- Posting of depreciation: Depreciation must be posted according to the applicable accounting principles using the correct general ledger accounts and calculation of the amounts.
- Integration with other SAP modules: Asset Accounting can be integrated in other SAP modules, such as Project System (PS), Investment Management (IM), Internal Orders (IO), Plant Maintenance (PM), and Cost Accounting (CO).
- To make data migration as simple as possible.

There can be many more requirements that need to be taken into consideration when setting up Asset Accounting.

Therefore, before setting up asset master data, it is important to understand how you can control all your requirements and what **tools** enable you to do so. This starts with familiarizing yourself with the SAP terminology.

In this chapter, we will discuss everything you need to understand when creating and maintaining asset master data.

2.1 Organizational structure

The organizational structure in the SAP system is always the foundation for a module. For Asset Accounting, there are three important organizational objects (other organizational objects are also used but they are not all specific to Asset Accounting). These three objects already existed in the very first SAP releases and they still exist in SAP S/4HANA.

The organizational objects are: chart of depreciation, depreciation areas, and asset classes. When you define the organizational objects for Asset Accounting, other organizational objects such as company code, controlling area, etc. should already have been created.

2.1.1 Chart of depreciation

The *chart of depreciation* is basically just a list of depreciation areas. A depreciation area is designed to value an asset according a specific purpose, such as group accounting or tax accounting.

SAP provides sample charts of depreciation for many countries. You can use these samples as the basis for your own chart of depreciation. Based on your own requirements, you can add or remove depreciation areas.

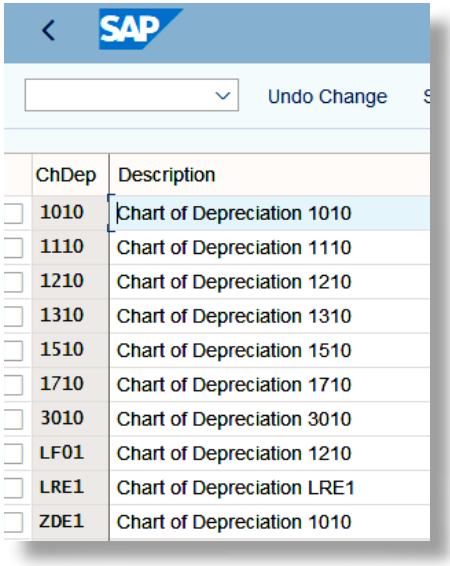

Figure 2.1: Sample charts of depreciation

You define a chart of depreciation for a country and then assign it to a company code within that country. You can use more than one chart of depreciation for each country. You can assign each company code in a country to exactly one chart of depreciation; normally that is the country chart of depreciation.

Figure 2.1 shows a couple of the sample charts of depreciation provided by SAP. This is in the IDES system; in production systems, many more country-specific charts of depreciation are available.

You maintain the charts of depreciation in Customizing via the following path: Financial Accounting • Asset Accounting • Organizational Structures • Copy Reference Chart of Depreciation/Depreciation Areas.

2.1.2 Depreciation area

As stated before, depreciation areas are designed to value an asset according to a specific purpose. For example, you can value an asset for group accounting or tax accounting purposes. However, you can also use special depreciation areas to fulfil your own reporting requirements. For example, you can use a special depreciation area for investment support (for subsidies granted by the state).

Sometimes, a depreciation area is required for technical reasons. For example, you need to have a depreciation area for each local currency.

The way the accounting principles have been defined have an impact on the definition of depreciation areas. This is explained in more detail in Section 2.2 and also in the section on asset migration, Section 8.2.

Figure 2.2 shows the depreciation areas for example chart of depreciation 1010. For each depreciation area, you can see whether it is a real area or not, the target group, accounting principle, and how the deprecation area posts in the general ledger.

- A real depreciation area means that the valuation for this area is stored in the database. If an area is not a real area, the valuation is calculated every time it is reported. In the example, depreciation area 35 is not real, so its values will be derived (calculated).
- The target group shows the ledgers in which the values are posted. This can be combined with the accounting principles.

- The accounting principle indicates which reporting rules are to be applied during reporting. In the example, accounting principle (local) GAAP posts in target group ZL and accounting principle IFRS posts in target group 0L.
- The G/L column indicates whether or not posting takes place in real time. In the example, depreciation areas 1 and 32 post in real time. For the other areas, the values are stored in the database but there is no posting.

Warning: Interest calculation indicator

For leased assets, the interest calculation indicator must be set in the depreciation area otherwise no interest will be calculated or posted.

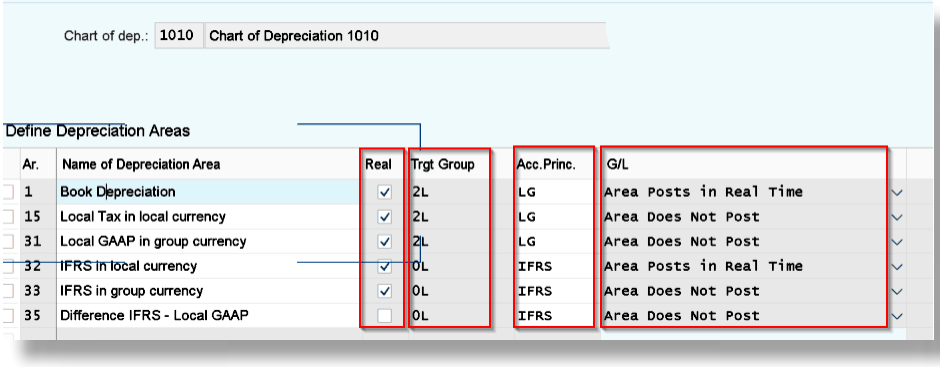

Figure 2.2: Depreciation areas

In addition to real depreciation areas, you can also have *derived depreciation areas*; the values for these areas are calculated from other depreciation areas. Figure 2.3 shows the details of the derived depreciation area 35. You can see that the values are not posted in the general ledger. The values for the area are calculated as the difference between area 33 and 1.

You maintain the depreciation areas in the chart of depreciation in Customizing via the following path: Financial Accounting • Asset Accounting • Organizational Structures • Copy Reference Chart of Depreciation/Depreciation Areas.

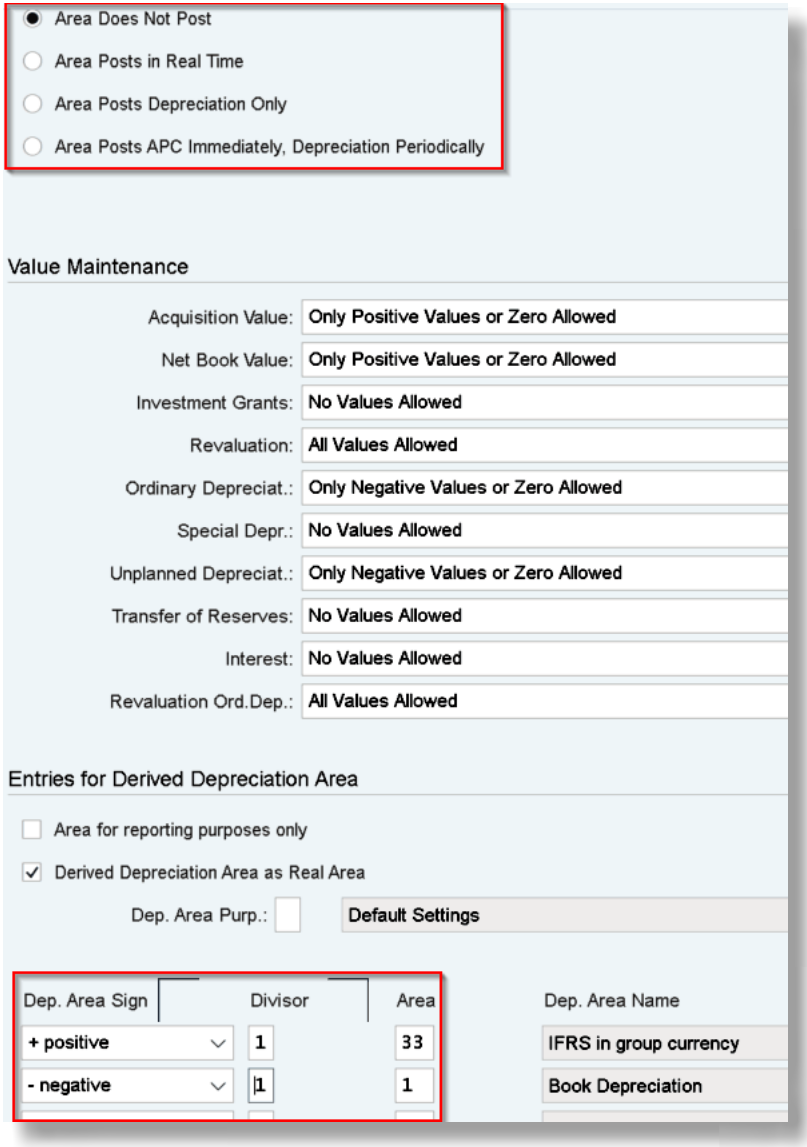

Figure 2.3: Derived depreciation area

You maintain details of the depreciation areas themselves in Customizing via the following path: Financial Accounting • Asset Accounting • General Valuation • Depreciation Areas.

B Index

A

accounting principles 19
ACDOCA 11, 12, 183
appropriation request 172
  depreciation simulation 173
Asset Accounting document 103
  reversal 101
asset acquisition 67
  asset under construction 75
  credit note 99
  down payment 93
  post-capitalization 96
  technical clearing account 72
  using an offset account 67
  using Purchasing 69
asset class 18, 22
  account determination 22
  asset under construction (AuC) 24
  change 26
  down payment 94
  equipment master 177
  LVA asset 24
  material group assignment 70
  Real Estate 181
  screen layout 31
  subnumbers 44
Asset Explorer 62, 79, 90, 99, 113, 115, 139, 185
  depreciation calculation 126
asset master data 30
  block 64
  create multiple assets 47
  custom fields 49
  delete 64
  equipment 38
  main asset 44
  profit center 34
  segment 34
  subnumber 44
  validation 43
asset sale 148, 153
  with customer 148
  without customer 153
asset transfer 86
  intercompany 87
  intracompany 91
asset under construction 75
  full settlement from internal orders 78
  full settlement from WBS elements 78
  periodic settlement from internal orders 76
  periodic settlement from WBS elements 76
  settlement to final asset 83

C

Central Finance 204
chart of depreciation 18
compare asset values 115
credit note 99

D

depreciation 107
  amount calculation 125
  correction 120
  declining balance depreciation 108
  display result 119
  linear depreciation 108
  multilevel method 133
  periodic depreciation 117
  period interval 125
  posting run 117

posting scheme 123
status 118
unplanned depreciation 117
zero depreciation 108
depreciation area 18, 19
currency 28, 201
derived depreciation area 20
real depreciation area 19
time interval 110
depreciation correction
manual depreciation 121
unplanned depreciation 121
write-up 121
depreciation key 107
parameters 110
depreciation method 107
depreciation process 107
depreciation run 117, 134
depreciation simulation 33
internal order 167
investment program positions 171
WBS element 171

F

financial reporting
Line Item Browser 183

G

group asset 45

H

HANA database 11

I

impairment 137
IM program structure 82
integration in the general ledger 26
account approach 27
G/L account master data 28
ledger approach 28
statistical assignment 29
integration with Consolidation 181
integration with Controlling 159
capitalized assets 159
planned assets 166
post plan zero values 165
transfer of planned values 164
integration with Plant Maintenance 176
integration with Real Estate 179
interest 129
depreciation key 129
example of calculation 131
rate 129
internal order 167
settlement 51
internal order 167
investment program 82
investment support 143
investment support key 143
item ID 82

L

leased assets 23
ledger accounting 12
low-value assets (LVA) 8, 24, 107

M

migration 197
asset migration 200
existing SAP system 198
greenfield implementation 202
legacy system 202
LSMW 202
Maintenance Planner 198
prerequisites 197
Software Update Manager 199
tools 198
upload asset data 204

N

new Asset Accounting 11
  migration 197
  obsolete transactions 12
  renewed transactions 12
  table structure 13
new General Ledger 11, 27

O

organizational structure 18
  change 25

P

period closing 191
period-end processing 183
periodic job
  beforehand checks 135
periodic jobs 134
  depreciation run 134

R

reports on Asset Accounting 184
retirement 137
revaluation 140

S

SAP Fiori 9
scrapping 156
simulation version 190
single source of truth 12
smoothing 97

T

transaction code 12
transaction FAGLL03 124
transaction type 26, 79, 90, 99, 121, 137, 139, 145, 149, 181, 187

V

value adjustment 137

W

WBS element 170

Y

year-end process 135
  balance carryforward 135
  close the old year 135
  reporting 183