2015 CONTROLLING
SEPTEMBER 21–24 • SAN DIEGO

MICHAEL MANAGEMENT CORPORATION

How to Verify Depreciation Values for SAP Asset Accounting

Presented by
Thomas Michael & Kent Bettisworth

Michael Management Corporation
www.michaelmanagement.com

Meet the Experts

Email us anytime – don't be shy!

Thomas Michael
tmichael@michaelmanagement.com

Kent Bettisworth
kent@bettisworthassociates.com

www.michaelmanagement.com

How the heck did it get this number?

	A	B	C	D	E
1					
2	Asset	Sub	Year	Cost	Acc. Dep.
3	112233	0	2012	55,000	20,000
4					

Explain how you got to this amount.

Planned values Federal Tax ACRS/MACRS

Value	Fiscal year start	Change	Year-end	Crcy
APC transactions	55,000.00		55,000.00	USD
Acquisition value	55,000.00		55,000.00	USD
Ordinary deprec.	11,000.00-	17,600.00-	28,600.00-	USD
Special depreciation				USD
Unplanned dep.				USD
Write-up				USD
Value adjustment				USD
Net book value	44,000.00	17,600.00-	26,400.00	USD

www.michaelmanagement.com

Agenda

- Introduction
- Basic depreciation rules in SAP
- Asset Master Record
- Asset Explorer
- Example
- Summary
- Q&A

www.michaelmanagement.com

Introduction

- SAP calculates all depreciation values for an asset automatically when:
  - The asset is first posted to
  - The asset master record is changed (automatic recalculation)
  - The asset is subsequently posted to (i.e. additional acquisitions, transfers, retirements, etc.)
  - Manually requested/performed (i.e. AS02, AFAR)

www.michaelmanagement.com

Introduction

- The asset master record includes all information needed to calculate depreciation in SAP:
  - Depreciation key (includes the method and convention)
  - Depreciation start date (both for ordinary depreciation and for special bonus dep)
  - Useful life
  - Additional info: i.e. scrap value, multi-shift, etc.

www.michaelmanagement.com

Introduction

- All depreciation books are calculated at the same time
- You can recalc values for all open fiscal years
- Typically, only the financial book area posts values to the G/L, all other areas (incl. tax) are just calculated values (no debit/credit or offsetting accounts)

www.michaelmanagement.com

Agenda

- Introduction
- Basic depreciation rules in SAP
- Asset Master Record
- Asset Explorer
- Example
- Summary
- Q&A

www.michaelmanagement.com

Basic Depreciation Rules in SAP

- All depreciation values are always calculated for the entire fiscal year, never for a specific month/period
- Depreciation Key typically includes a mathematical formula (as opposed to specific percentages like you see in the IRS tables)
- …although, specific percentages are possible in SAP, too

www.michaelmanagement.com

Basic Depreciation Rules in SAP

- When you make mid-year changes to any depreciation parameter (i.e. new key, date or useful life) SAP will <u>recalculate depreciation for the entire fiscal year</u> again…
- …making it <u>impossible</u> to apply mid-year depreciation changes
- …unless you are on the '<u>new depreciation calculation</u>' which allows period-specific depreciation parameters

Agenda

- Introduction
- Basic depreciation rules in SAP
- Asset Master Record
- Asset Explorer
- Example
- Summary
- Q&A

Asset Master Record

Change Asset: Initial screen

Master data   Depreciation areas   Asset values

Asset   4241
Subnumber   0
Company Code 3000

Transactions:
AS02 – Change asset
AS03 – Display asset

Asset Master Record

Change Asset: Master data

Asset values

Asset 4241 0 Lincoln Navigator
Class 3100 Vehicles

General | Time-dependent | Allocations | Origin | Net Worth T

Description Lincoln Navigator

Asset main no. text Lincoln Navigator
Acct determination 30000 Fixtures and fittings
Inventory number
Quantity
☑ Manage historically

Inventory
Last inventory on ☐ Include as
Inventory note

Posting information
Capitalized on 07/01/2012 Deactivation

Capitalization Date =
In-service Date

Used to determine the
depreciation start date.

Note:
There's only 1 cap. date!

Asset Master Record

Change Asset: Master data

Asset values

Asset 4241 0 Lincoln N
Class 3100 Vehicles Compar

General | Time-dependent | Allocations | Origin

Valuation

A..	Depreciation area	DKey	UseLife	Prd	OD
01	Book deprec.	LINB	5	07/	
02	Book deprec.	LINB	5	007/01/2012	12
03	Book deprec.	LINB	5	007/01/2012	0	12
10	ACRS/MACRS	M200	5	07/01/2012	0	12
11	ALT MIN	NA0	5	07/01/2012	0	12
12	ACE	ACE	5	07/01/2012	0	12

Depreciation key = Method &
Convention

Useful life

Depreciation start date

A few standard SAP-delivered
tax depreciation keys:

M200 – 200% DB, HY
M150 – 150% DB, HY
ACE – S/L, HY
EP1 – S/L, MM

Asset Master Record

Change Asset: Depreciation area ACRS/MACRS

Asset values   Data for revaluation   ◄ ►

Asset 4241 0 Lincoln Navi
Class 3100 Vehicles 0
Area 10 ACRS/MACRS Federal Tax ACRS/MACRS

Interval from 01/01/1900 to 12/31/9999
General Specifications

Depreciation Key	M200	MACRS 3,5,7,10 years property
Useful life	5 /
Exp. Useful Life	0 / 12
Exp. Life Spec. Dep.	/
Changeover year	/
Units Depreciated	

Start of Calculation
Ord.dep.start date 07/01/2012
Spec.depreciation
Operating readiness 07/01/2012

Special depreciation start date
for bonus depreciation –
separate from ordinary
depreciation start date!

Asset Master Record

Change Asset: Depreciation area ACRS/MACRS

Asset values   Data for revaluation   ◄ ►

Time-dependent depreciation calculation?

Asset	4241	0	Lincoln Navigator	
Class	3100		Vehicles	Company Code 30
Area	10 ACRS/MACRS		Federal Tax ACRS/MACRS	

Interval from 01/01/1900 to 12/31/9999

General Specifications

Depreciation Key	M200	MACRS 3,5,7,10 years property	
Useful life	5 /	Start of Calculation	
Exp. Useful Life	0 / 12	Ord.dep.start date	07/01/2012
Exp. Life Spec. Dep.	/	Spec.depreciation	
Changeover year	/	Operating readiness	07/01/2012
Units Depreciated			

www.michaelmanagement.com

Agenda

- Introduction
- Basic depreciation rules in SAP
- Asset Master Record
- Asset Explorer
- Example
- Summary
- Q&A

www.michaelmanagement.com

Asset Explorer / Asset Value Display

- Very powerful transaction
- Display single or multiple years of depreciation
- Compare depreciation between books for one or multiple years
- Display depreciation calculation logic
- Simulate depreciation changes and transactions
- Translate currencies

www.michaelmanagement.com

6/1/2015

Asset Explorer / Asset Value Display

Transaction:

AW01N – Asset Explorer

Asset Explorer / Asset Value Display

Scroll through past/future years

Review planned depreciation, compare to other books, project for multiple years, review/simulate parameters

Review beginning of the year values, changes, end of the year values.

Depreciation (ord., unpl., spec.), other adjustments

Review transactions that make up the above numbers

Asset Explorer / Asset Value Display

Display Depreciation Calculation:

Explain how you got to this amount.

7

Asset Explorer / Asset Value Display

IRS MACRS Percentage Tables

📄 Depreciation Tables used for Personal Property, Land I... Residential Rental Properties.

IRS percentage rate for 2nd year

MACRS 5-year Property

Year	Percentage
1	20.00%
2	32.00%
3	19.20%
4	11.52%
5	11.52%
6	5.76%

www.michaelmanagement.com

Asset Explorer / Asset Value Display

ion Calcuation - Period Interval Method

Beginning of the year values plus all transactions for the selected year

Year	TotAPC PY	TotODep.PY	Total ODep	PlanODepPY
2013	55,000.00	11,000.00-	17,600.00-	17,600.00-

IRS vs. SAP base value

Period factor = how many months?

Calculation for the selected transaction above

Type	To Period	Base Value	Prd Fact.	Percentage	Σ	Calc.Amt
N	24	44,000.00	1.00000	0.400000		17,600.00-
					=	17,600.00-

www.michaelmanagement.com

Asset Explorer / Asset Value Display

ion Calcuation - Period Interval Method

+/- Sign Rounding Calculation Order Dependent Areas Mas

Year	TotAPC PY	TotODep.P	Total OD
2013	55,000.00	11,000.00-	12,571.00-

More details calculation schemes here

Calculation Parameters Depreciation Terms Period Information

Depreciation Terms

Period Information

Year	Type	To Period	Usefl.Life	ExpULPrd	Exp.Life/Segment	Wt.Pro		rd Seg.	ChYr
2013	N	24	168	12	2.400000000000000E+01	24		24	2017

www.michaelmanagement.com

Agenda

- Introduction
- Basic depreciation rules in SAP
- Asset Master Record
- Asset Explorer
- Example
- Summary
- Q&A
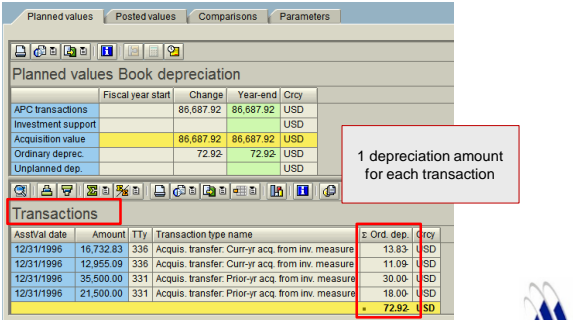
www.michaelmanagement.com

Old Depreciation Calculation

- Transaction-based calculation
- Separate depreciation amount for every transaction posted (stored in table ANEP, fields NAFAB & SAFAB)
- All transactions are processed in sequential order

www.michaelmanagement.com

Old Depreciation Calculation

| Planned values | Posted values | Comparisons | Parameters |

Planned values Book depreciation

	Fiscal year start	Change	Year-end	Crcy
APC transactions		86,687.92	86,687.92	USD
Investment support				USD
Acquisition value		86,687.92	86,687.92	USD
Ordinary deprec.		72.92-	72.92-	USD
Unplanned dep.				USD

1 depreciation amount for each transaction

Transactions

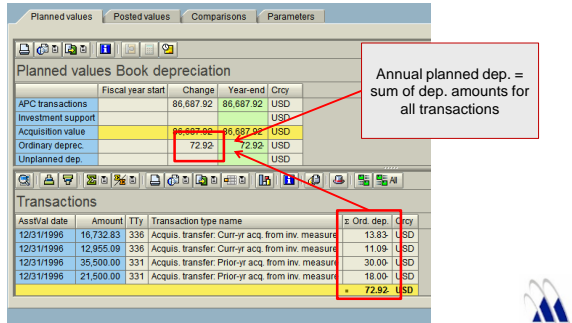| AsstVal date	Amount	TTy	Transaction type name	Σ Ord. dep.	Crcy
12/31/1996	16,732.83	336	Acquis. transfer: Curr-yr acq. from inv. measure	13.83-	USD
12/31/1996	12,955.09	336	Acquis. transfer: Curr-yr acq. from inv. measure	11.09-	USD
12/31/1996	35,500.00	331	Acquis. transfer: Prior-yr acq. from inv. measure	30.00-	USD
12/31/1996	21,500.00	331	Acquis. transfer: Prior-yr acq. from inv. measure	18.00-	USD
				72.92-	USD

www.michaelmanagement.com

Old Depreciation Calculation

- Annual depreciation = sum of the depreciation amounts calculated for each transaction
- Planned depreciation always based on annual values

Old Depreciation Calculation

Old Depreciation Calculation - Example

Example:
- Asset cost: $12,000
- Useful life: 10 years
- Straight-line depreciation (APC/UL)
- Fiscal Year = Calendar Year
- Pro-rata period control

Old Depreciation Calculation - Example

Annual planned dep. = sum of dep. amounts for all transactions

Acquisition posting as of 1/1/2010

Old Depreciation Calculation - Example

Next transaction:

- Partial retirement = $3,000
- Posting date = 9/30/2010
- Will reduce the annual depreciation to: ???

Old Depreciation Calculation - Example

Annual planned dep. = sum of dep. amounts for all transactions

Retirement posting as of 9/30/2010

Agenda

- Introduction
- Basic depreciation rules in SAP
- Asset Master Record
- Asset Explorer
- Example
- Summary
- Q&A

www.michaelmanagement.com

Summary

- Remember that SAP can calculate all US depreciation (book and tax) just fine

- Depreciation amounts in SAP are a direct result of configuration settings (depreciation keys, period controls), assigned depreciation parameters and posted asset values

www.michaelmanagement.com

Summary

- The Display Depreciation Calculation function in the Asset Explorer will tell you exactly how SAP arrived at a certain depreciation amount

www.michaelmanagement.com

Q&A

- Comments & Questions

- How to contact us:

  Kent Bettisworth
  kent@bettisworthassociates.com

  Thomas Michael
  tmichael@michaelmanagement.com

www.michaelmanagement.com

Controlling 2015 Conference

- To learn more from speakers like Tom and Kent, attend the Controlling 2015 conference September 21-24, 2015 in San Diego, CA
- Use discount code **SAPAAWebinar** to receive $125 off of conference registration through June 15

2015 | CONTROLLING
SEPTEMBER 21–24 • SAN DIEGO

www.michaelmanagement.com