



Financials2004

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Benefit from the Variance Analysis Capabilities in CO

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What We'll Cover ...

Objective: Provide tips and techniques to help you get the most from R/3's variance analysis functionality

- **Understanding Variance Analysis**
- **Variances from a Production Viewpoint**
- **Month-End Processes**
- **CO Variance Tracking in CCA**
- **Reporting and Analysis**

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- **What is variance analysis?**
 - Accounting for differences between actual and standard/plan values
 - Most U.S. manufacturers use some form of standard costing methodology
 - All companies leverage some form of planning
- **Why is variance analysis important?**
 - Excellent measure of manufacturing efficiency and productivity
 - Helps you understand the root causes of deviations impacting your P&L

- R/3 can help you measure and explain variances
 - Variance analysis tools are concentrated within CO-PC
 - Other modules may be used as well, depending on your configuration
 - ✓ For example, PP, CO-PA, CCA and Internal Order Accounting



- **What are your tracking options?**
 - Tracking manufacturing activity and variances only
 - Tracking overhead related variances only
 - Tracking a combination of both
 - Doing neither
- **What do we see in the field?**
 - A mixed bag
 - Variance analysis opportunities are not exploited to the extent one might think
 - For manufacturers, analysis is weighted toward inventory variances
 - For service companies, a basic plan/actual analysis

- **Opportunities for improvement lie on both sides of the variance equation**
 - Heavier planning integration will ease the analysis burden
 - Consider forecasting
 - Work toward tracking actual activity
 - Familiarize yourself with SAP's variance calculation functionality
- **Areas of focus for analysis will fall into two main foundations**
 - Manufacturing variances
 - Overhead variances

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- **Variations from a Production Viewpoint**
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Who Can Use Variance Analysis?

- Manufacturing variance analysis is open to anyone who produces a valuated stock material
- Manufacturing options with variances include
 - Make to stock (MTS) with valuated inventory
 - Make to order (MTO) with valuated inventory

How Are Variances Tracked in R/3?

- For MTS/MTO, there are a number of configuration paths
 - Product Cost by Order
 - ✓ Tracks plan/actual/variance activity at an order level
 - ✓ WIP costs are carried at actual
 - ✓ Meaning manufacturing variances are carried in WIP at month-end
 - ✓ Variances are not recognized until the associated order is delivered and TECO'd

- For MTS/MTO, there are a number of configuration paths (cont.)
 - Product Cost by Period
 - ✓ Also tracks plan/actual/variance activity at an order level
 - ✓ Is usually monitored on a period basis, however
 - ✓ WIP costs are carried at target
 - *Variances are removed from WIP during WIP calculation*
 - ✓ The variances are recognized as a period cost

- Categories are used to identify/break down the cause of the total production variance
- What categories are available?
 - Input Side – Deals with activity/material issued to the production order
 - ✓ Price variance
 - ✓ Resource variance
 - ✓ Quantity variance
 - ✓ Remaining variance
 - ✓ Scrap

R/3 Uses Variance Categories to Break Down Totals (cont.)

- **What categories are available? (cont.)**
 - Output side – Variances caused by an adjustment to the planned quantity
 - ✓ Price variance
 - ✓ Mixed-price variance
 - ✓ Lot size variance
 - ✓ Remaining variance

Implementing Manufacturing Variance Analysis Can Be Difficult

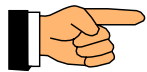
- **R/3 is different from many legacy systems in the areas of:**
 - Inventory consumption and the associated accounting
 - Accounting treatment for WIP and period-based manufacturing variances
 - Managing the production control processes required to track and post production activity (confirmations, backflushing, manual issues and receipts)
- **As a result, some companies either**
 - Retained their legacy systems, or
 - Adopted third-party solutions including MS Excel or MS Access

Shop Floor Monitoring Is Still Necessary

- Variance analysis lets you know how you did LAST month
 - It's still important → it reflects your financial position
 - It's difficult to use for current-month decision-making



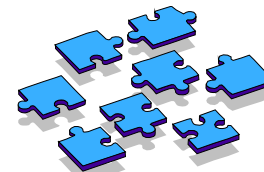
- Shop floor systems let you know how you are doing THIS month
 - Monitors current production activity
 - Lets you know immediately of deviations from a standard recipe/routine
 - ✓ When you are scrapping at a higher/lower rate than expected
 - ✓ When your labor pool is not being used as efficiently as possible



Note

Immediate decisions require the most recent data and therefore require a good shop floor system

- You can control how R/3 captures and reports variances
 - R/3 variance analysis is quite flexible
- Key questions to ask before configuration
 - Will you want to confirm actual or planned quantities for activities and material consumption during confirmations?
 - Will you manage overhead variances on the cost center, or in the production order system?
 - What type of manufacturing/costing solution should be configured?



Building Block

Variance Analysis: Key Configuration Settings (cont.)

- **Key questions to ask before configuration (cont.)**
 - Will costing sheets be used to manage overhead, or will we be configuring for activity splitting and price revaluation?
 - To which modules should variance activity be migrated during month-end processing?
- **For answers to some of these key questions, see the appendix section, "Production Variance Configuration," on your CD**

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- **Month-End Transactional Processes**
- CO Variance Tracking in CCA
- Reporting and Analysis

Month-End Processing – Overview

- Monthly production/costing activities have considerable impact on subsequent analysis capability
 - Questions to ask when preparing your production procedures
 - ✓ Where will I manage/analyze my direct activity allocations?
 - ✓ Where will I manage/analyze my overhead?
 - ✓ Where should my material-related variances be driven and reported?
- Answers will determine the processing path you take



Unless otherwise noted, it is assumed that activity-related variances will be driven back to the production order system through splitting and price revaluation

Month-End Processes We'll Discuss

1. Confirmations
2. Overhead Calculation
3. Activity Price Management at Month-End
4. Variance Calculation



Checklist

- **What are confirmations?**
 - Confirmations “charge” activities/materials to a production order/cost collector
 - Activity confirmation occurs via activity allocations linked with the routing
 - Material consumption can be automated through the backflushing process
- **You can enter actual or standard values on confirmations**
 - Which one you enter determines where you expect to do your absorption analysis
- **Use transaction code CO11 – Time Ticket**

Process #1 – Confirmations (cont.)

- **Tip #1: To track labor variances by cost center, confirm at standard**
 - The production credit will route to the direct cost center assigned in the routing/work center mapping
- **Result: A nice picture of production credit at standard vs. actual costs**
 - Your over/under-absorbed position can be easily tracked and reported
 - Variances appear as all price variances in the production order system



Confirmations at standard help you generate price/quantity variances on the cost center

Process #1 – Confirmations (cont.)

- **Tip #2: To track labor variances at a material/order level, confirm at actual**
 - Assumes that you can tie actual labor quantities to an order level
 - Any quantity variance realized at month-end in the cost center will be re-categorized as a price variance in the production order system

Confirmations at actual help you generate price/quantity variances at an order level

Unfortunately, you lose the ability to determine any quantity variance at the cost center

- **Tip #3: If possible, backflush material consumption at actual**
 - Gives you proper quantity and price variances in the production order system
 - Saves you from having to move usage variances to an order/cost collector through inventory movements
 - This has a way of skewing results at anything above an order level
- **Not everyone is capable of determining accurate usages at the point of confirmation**



To save yourself some processing time at month-end, you may want to allow your usages to flow through monthly inventory adjustments

- **Overhead can be applied in one of two ways**
 - Costing sheets
 - Activity allocation during order confirmation
- **When using a costing sheet to apply overhead**
 - The amount applied is tied to some other consumption activity
 - Depending on how you like to apply overhead, it can either be linked to:
 - ✓ A specific point in your routing through activity confirmation, or
 - ✓ Some other consumption activity like materials issued at a later time

Process #2 – Overhead

Using Costing Sheets

- **How to do it**
 - Transaction code CO11 – Time Ticket for Order Confirmation
 - Transaction code CO43 – Collective Overhead Allocation
- **Why use a costing sheet to apply overhead?**
 - You want to apply overhead by some other means than activity confirmation
 - You are unable to determine the proper amount of overhead to apply at any point in the routing

Process #2 – Overhead

Using Costing Sheets (cont.)

- **Pros**
 - Able to apply overhead based upon material consumption/delivery
 - No need to determine in the routing when overhead is consumed

- **Cons**
 - Overhead variance will not be available to you in the production order system
 - ✓ **No order level variance analysis**
 - Separate settlement transaction to get these variances into CO-PA

Process #2 – Overhead: *Using Activity Allocation*

- **Why use activity allocation to apply overhead?**
 - You want to link overhead absorption to a specific routing operation
 - You want to consistently manage all your manufacturing variances

Process #2 – Overhead:

Using Activity Allocation (cont.)

- **Pros**
 - All production variances can be managed in the same manner – i.e., in the production order system
 - No separate settlement activity at month-end to move to CO-PA

- **Cons**
 - Extra confirmation posting needed
 - Cannot directly link overhead consumption to material consumption/delivery

Process #3 – Activity Variance Transfer

- For your activities, you must have a method of transferring your variances from cost center accounting to either CO-PA or the production system
- Two schools of thought exist
 - School #1: Manage your activity variances (direct and indirect costs) on the cost center, and settle the variances to CO-PA
 - School #2: Manage your activity variances in the production order system through splitting, price calculation, and activity price revaluation

Process #3 – Activity Variance Transfer

School #1

- Manage activity variances on the cost center
- Pros
 - No need for cost splitting and price calculation/revaluation
 - Good picture at a department level
 - If you do not manage these costs at an order/material level, why go through the bother of driving the variances to the production system?

Process #3 – Activity Variance Transfer

School #1 (cont.)

- Manage activity variances on the cost center (cont.)
- Cons
 - If you want to manage variances at the order/material level, you will not be able to
 - FI entry for this type of movement will have to be manual
 - ✓ The cost center to CO-PA settlement will be an intra-CO movement only
 - ✓ If you make this entry, be sure to select a G/L account that does not have a corresponding cost element

Process #3 – Activity Variance Transfer

School #2

- Manage activity variances in the production order system
- Pros
 - If you manage these costs at an order/material level, this is the only method for you to drive the variances to the production system
 - Still possible to have a clear picture of variances in CCA
 - ✓ Through a custom Report Painter report

Process #3 – Activity Variance Transfer

School #2 (cont.)

- Manage activity variances in the production order system (cont.)
- Cons
 - Extra steps of cost splitting and price calculation/revaluation
 - Some activity quantity variances may be converted to price variance
 - ✓ Can occur when transferred to the production system during activity price revaluation
 - ✓ Unavoidable, since the vehicle for moving these variances back to the production order is to change the activity price

Process #4 – Variance Calculation

- **Variance calculation and settlement are the final steps**
 - Variance calculation – Transaction KKS1
 - Settlement – Transaction CO88
- **Tip: Keep your production order statuses up to date!**
 - Close (or set the deletion flag for) completed and settled orders
 - You will greatly minimize your variance and WIP calculation run times
 - If you generate a considerable number of orders each month, implement a mass maintenance process



Tip

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- **What variance analysis options are available to you within CCA?**
 - Standard plan/actual/variance reporting
 - More robust forecast/actual/variance analysis
 - Detailed activity-based analysis utility

- **Standard plan/actual variance analysis**
 - Same thing companies have been doing since the beginning of time
 - Basic analysis comparing original plan quantities/dollars to actuals
 - Focus is more about timing than cause
- **Forecast/Actual variance analysis**
 - Variation on a theme, but more accurate
 - The forecasting exercise allows you a better view of your current operating landscape
 - Focus remains more on timing

- **Detailed, activity-based variances**
 - Similar to your manufacturing variance analysis
 - Focus is divided between input and output variances
 - Relies on target calculations to compute variances
- **What are target costs in CO?**
 - SAP computation that takes a planned activity and adjusts it for actual activity incurred
 - Calculation of the “operating rate” is the key
 - ✓ Operating rate measures the utilization of an activity at a cost center level
 - ✓ $(\text{Actual activity} / \text{Planned activity}) \times 100$

- **Target costs are calculated in four ways**
 - Activity-dependent costs, not incurred through IAA
 - Activity-dependent costs incurred through IAA
 - Activity-independent costs
 - For credit items from IAA
- **Each formula has a heavy reliance on plan activity**
- **Target is calculated as a part of variance calculation program**
 - Transaction KSS1 – CCA Variance Calculation

- **Once variance calculation is complete, you must run actual cost splitting**
 - Splitting assigns the activity-dependent costs to the appropriate activity
 - Assigned through a combination of user/SAP-defined splitting rules
- **The act of splitting will better align your activity-dependent costs, and thus produce better variances**
 - Example: You have a number of actual payroll accounts and one labor activity type. Splitting will associate these actual payroll costs with the labor activity. Your variance analysis will now be able to give you an accurate picture

- **Actual Cost Splitting is accomplished in two steps:**
 - Step 1: SAP allocates actual costs to activity types based on the target quantities calculated
 - Step 2: Only necessary if you have activity-independent costs on your cost center. If the system cannot determine a target cost on its own for allocations, it will use a user-defined splitting structure for assistance
- **A splitting structure is nothing more than mapping accounts to activities**
- **Once variance calculation and splitting are complete, you can begin your analysis**

CO Variance Analysis in CCA (cont.)

Cost centers: actual/plan/variance



Cost centers: actual/plan/variance		Date: 01/20/2004	Page: 2 / 3
			Column: 1 / 2
Cost center/Group	161170	MK20 MOR	
Person responsible:	N/A		
Reporting period:	12 to 12 2003		



Cost elements	Act.costs	Plan.costs	Abs. var.	Var. (%)
501100 DIRECT LABOR	242,700.81	408,723.00	166,022.19-	40.62-
* Debit	242,700.81	408,723.00	166,022.19-	40.62-
589101 Direct Labor	481,431.44-	651,232.90-	169,801.46	26.07-
* Credit	481,431.44-	651,232.90-	169,801.46	26.07-
** Over/underabsorption	238,730.63-	242,509.90-	3,779.27	1.56-

CO Variance Analysis in CCA (cont.)

Cost centers: actual/plan/variance

On/off | Column

Cost centers: actual/plan/variance Date: 01/20/2004 Page: 2 / 3

Column: 2 / 2

Cost center/Group 161170 MK20 MOR
 Person responsible: N/A
 Reporting period: 12 to 12 2003

Cost elements	Actual qty	Plnd qty	Abs. var.	Var. (%)
501100 DIRECT LABOR				
* Debit				
589101 Direct Labor	16,733.5- HR	22,635.7- HR	5,902.1 HR	26.07-
* Credit	16,733.5- HR	22,635.7- HR	5,902.1 HR	26.07-
** Over/underabsorption	16,733.5- HR	22,635.7- HR	5,902.1 HR	26.07-

CO Variance Analysis in CCA (cont.)

Display variant SAP Basic List List sorted by Costcenter, Activitytype

Cost ctr	Description	ActTyp	Op.rate	Target costs	Control costs	Act.costs alloc	Variance	Var.(%)
161170	MK20 MOR	DIRLBR	73.93	637,853.00	405,225.53	481,431.44-	76,205.91-	11.95
161170	MK20 MOR	MACHF	72.77	1,715,532.23	1,428,196.27	1,282,291.40-	145,904.87	8.50

Detail Screen ✖

Cost center 161170 MK20 MOR
 Activity type DIRLBR
 Currency USD American Dollar
 Operating rate 73.93 %
 Plan quantity 22,635.675 HR
 Actual quantity 16,733.533 HR
 Allocated actual qty 16,733.533 HR

	total	fixed	variable
Control costs	405,225.53	405,225.53	0.00
Target costs	637,853.00	637,853.00	0.00
Act. costs allocated	481,431.44-	481,431.44-	0.00
Input price variance	0.00	0.00	0.00
Input qty variance	0.00	0.00	0.00
Resource-usage var.	0.00	0.00	0.00
Remaining input var.	232,627.47-	232,627.47-	0.00
Var. input side	232,627.47-	232,627.47-	0.00
Output price var.	9,895.50-	9,895.50-	0.00
Output qty variance	0.00	0.00	0.00
Fixed-cost variance	166,317.06	166,317.06	
Remaining variance	0.00	0.00	0.00
Output side variance	156,421.56	156,421.56	0.00
Variance	76,205.91-	76,205.91-	0.00

✔ ✖

CO Variance Analysis in CCA (cont.)

- **Input side variances**
 - Made up of all the debits and credits, other than the credits from activity allocation
 - ✓ Input price
 - ✓ Input quantity
 - ✓ Resource usage
 - ✓ Remaining input
- **Output side variances**
 - Consists of all the credits due to activity allocations
 - ✓ Output price/quantity
 - ✓ Fixed cost
 - ✓ Remaining
 - ✓ Idle-capacity

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- **Reporting and Analysis**

- Variance reporting has historically been considered inadequate
 - Some felt it was unable to properly capture and report meaningful information
- Advances in reporting now make a standard R/3 solution possible
 - For analyzing production variances
 - ✓ CO-PC drill-down reporting
 - ✓ Summarization hierarchies
 - ✓ Report Painter (KKBC, CCSS)
 - ✓ SAP-delivered reports



- Advances in reporting now make a standard R/3 solution possible (cont.)
 - For analyzing overhead and labor variances
 - ✓ CO-PC drill-down reporting
 - ✓ Report Painter (CCSS, KKBC)
 - ✓ SAP-delivered reports

- **Drill-down reporting in CO-PC**
 - The information read by the CO-PC drill-down tool is sourced from the production order system
 - Drill-down reporting should be the cornerstone of any good analysis reporting solution
 - ✓ It is an extremely flexible and accurate variance analysis/reporting tool
 - SAP delivers all the available characteristics and key figures used by the utility in one nice, neat summarization level
- **Transactions for Drill-down reporting**
 - Report Execution: KKO0
 - Data Collection: KKRv

CO-PC Drill-down Reporting (cont.)

- This is an example of what a CO-PC drill-down report could look like

Report Edit Goto Navigate Extras Settings System Help

Execute Production Variances - Mftg Plants: overview

Production Variances - Mftg Plants

Technical Report Name: PRODVAR
 SAP User Name: .DAVIDN
 From Period: To Period:
 From Plant: Plant:

Navigation
 Order type
 Order
 Material
 Prod. version

Cost component Displayed in	From period/year							
	Delv Pcs 1 *	Standard 1 USD	Actual 1 USD	WIP 1 USD	Variance 1 USD	Price 1 USD	Quantity 1 USD	Res
◊Not assigned	7,482,316	187,347-	0	188,766-	1,418-	0	0	
◊Raw Materials Used	0	274,963	346,726	0	71,764	2,896-	5,593	7!
◊Semi/Fin Goods Used	0	1,521,276	1,409,612	0	111,664-	1,891	23,576	11!
◊Labor	0	655,326	637,698	0	17,628-	73,174	63,215-	
◊Overhead	0	587,292	600,735	0	13,443	38,976	709	!
◊Natural Gas	0	502,287	441,956	0	60,331-	29,077-	16,004-	
◊Electricity	0	124,748	121,298	0	3,450-	1,133-	295	
◊Maintenance	0	424,266	423,367	0	899-	14,217	825-	
◆Result	7,482,316	3,902,811	3,981,393	188,766-	110,184-	95,153	49,871-	5!

- Certain characteristics, like material group, are not available as a standard setting
 - This data is useful as a material analysis alternative
- Here's a workaround
 - SAP allows you to define a neutral field called "product group"
 - Choose one of the following for the product group definition
 - ✓ Material group
 - ✓ CO Product group
 - ✓ Product hierarchy
 - Define it on the Control Parameter Settings screen (transaction OKN0)

CO-PC – Tip 1: Maintain Product Group Settings (cont.)

- Maintain the product group type field for enhanced reporting
- Control cost updates are important if you are in a “product cost by period” environment

Control Parameters for Information System
Report Parameters Edit Goto Environment System Help

Display Fields Data Extraction/Product Drilldown Report Selection

Product drilldown

Cost comp. str.	02
Prod. group type	Material Group

Order Types

Control costs

Are updated

Tcode OKN0

- For better WIP analysis, maintain WIP cost elements in Cost Component Mapping
 - Assign WIP/RA cost elements at the cost component level
 - WIP breakdown will now be by component
 - ✓ Better analysis is achieved because you now get a perspective of what amount of each component is captured in WIP
 - The “not assigned” bucket will be the default component
 - ✓ Drill-down reporting uses the “not assigned” characteristic value when it cannot determine a valid solution

CO-PC – Tip 2: Maintain WIP Cost Elements (cont.)

- This is a CO-PC drill-down report, with the entire WIP amount captured in the “not assigned” bucket

Execute Production Variances - Mftg Plants: overview

Production Variances - Mftg Plants

Technical Report Name: PRODVAR
 SAP User Name: .DAVIDN
 From Period: To Period:
 From Plant: Plant:

Navigation
 Order type
 Order
 Material
 Prod. version

Cost component Displayed in	From period/year							
	Delv Pcs 1 *	Standard 1 USD	Actual 1 USD	WIP 1 USD	Variance 1 USD	Price 1 USD	Quantity 1 USD	Res
Not assigned	7,482,316	187,347-	0	188,766-	1,418-	0	0	
Raw Materials Used	0	271,863	246,726	0	71,764	2,896-	5,593	71
Semi/Fin Goods Used	0	1,521,276	1,409,612	0	111,664-	1,891	23,576	111
Labor	0	655,326	637,698	0	17,628-	73,174	63,215-	
Overhead	0	587,292	600,735	0	13,443	38,976	709	
Natural Gas	0	502,287	441,956	0	60,331-	29,077-	16,004-	
Electricity	0	124,748	121,298	0	3,450-	1,133-	295	
Maintenance	0	424,266	423,367	0	899-	14,217	825-	
Result	7,482,316	3,902,811	3,981,393	188,766-	110,184-	95,153	49,871-	51

CO-PC – Tip 2: Maintain WIP Cost Elements (cont.)

- Within this screen, the cost elements for creation and usage at a line ID level are mapped
- Cost element 9407 represents the WIP account for materials

COAr	Vsn	RA key	LID	WIP	Creation	Usage	ApplNo	UM
<input type="checkbox"/>	0	000002	ELE K	WIP Reserves				
<input type="checkbox"/>	0	000002	GAS K	WIP Reserves				
<input type="checkbox"/>	0	000002	LBR K	WIP Reserves				
<input type="checkbox"/>	0	000002	MAT K	WIP Reserves	9407	9407		
<input type="checkbox"/>	0	000002	MLO K	WIP Reserves				
<input type="checkbox"/>	0	000002	MNT K	WIP Reserves				
<input type="checkbox"/>	0	000002	OHD K	WIP Reserves				

**Tcode
OKGA**

CO-PC – Tip 2: Maintain WIP Cost Elements (cont.)

- This is the cost component maintenance screen
- Cost element 9407 represents the WIP account for cost component 1

The screenshot shows the SAP Cost Component Maintenance screen. The title bar reads "Change View 'Assignment: Cost Component - Cost Element Interval': Over". The main area contains a table with the following data:

Cost comp. str.	Chart of accts	From cost ...	Origin group	To cost ele...	Cost com..
02		4050		4050	1
02		4051		4051	1
02		9407		9407	1

The row with '02' in the 'Cost comp. str.' column and '9407' in the 'From cost ...' column is highlighted with a red box. The 'Dialog Structure' pane on the left shows a tree view with 'Assignment: Cos' selected. The status bar at the bottom indicates 'Position...' and 'Entry 1 of 3'.

CO-PC – Tip 2: Maintain WIP Cost Elements (cont.)

- Resulting change is an allocation of WIP among the cost components

Report Edit Goto Navigate Extras Settings System Help

Execute Production Variances - Mftg Plants: overview

Production Variances - Mftg Plants

Technical Report Name: PRODVAR
 SAP User Name: .DAVIDN
 From Period: To Period:
 From Plant: Plant:

Navigation
 Order type
 Order
 Material
 Prod. version

Cost component Displayed in	From period/year							
	Delv Pcs 1 *	Standard 1 USD	Actual 1 USD	WIP 1 USD	Variance 1 USD	Price 1 USD	Quantity 1 USD	Res 1 USD
◊Not assigned	1,437,986	0	0	0	120-	0	0	
◊Raw Materials Used	0	70,118	82,420	8,759-	3,543	3,438	366	
◊Semi/Fin Goods Used	0	213,111	511,229	297,587-	530	34-	3,514	
◊Labor	0	96,088	173,411	77,100-	224	9,680	7,109-	
◊Overhead	0	86,057	131,058	43,751-	1,250	3,377	1,770	
◊Natural Gas	0	32,877	119,620	85,160-	1,583	1,653	1,464	
◊Electricity	0	26,073	42,611	20,477-	3,940-	3,332-	234-	
◊Maintenance	0	26,870	80,736	53,756-	109	1,197	174	
◆Result								

- Summarization hierarchies in CO-PC can be customized to fit your reporting needs
- In particular, I've found them to be extremely helpful in analyzing material usage variances
- How are summarization levels designed?
 - Characteristic data is fed from the classifications system
 - Each summarization level is custom built. SAP does not deliver any preconfigured
- Transactions for viewing summarization hierarchies
 - KKBC_HOE: Execute Report
 - KKRC: Data Collection

- Consider using a status selection profile when creating summarization hierarchies
 - Helps minimize the number of production orders being read
 - Controls the number of objects being accessed by establishing a filter based on the status achieved
 - The profile can then be added to the summarization hierarchy to limit the number of orders being read and summarized
- Transaction codes
 - Status Selection Profile Creation – BS42
 - Summarization Hierarchy Creation/Maintenance – KKR0



Tip

Summarization Hierarchies – Tips (cont.)

- Here you see the assignment of the status selection profile to the summarization hierarchy
- Transaction code KKR0

The screenshot shows the SAP interface for summarization hierarchies. The title bar reads "Change View 'Data Scope (Object Types)': Overview". Below the title bar is a navigation pane with the following items:

- Summarization hierarchy
- >Data scope (object types)
- >Data Scope (Totals Records Tables)
- >Hierarchy levels

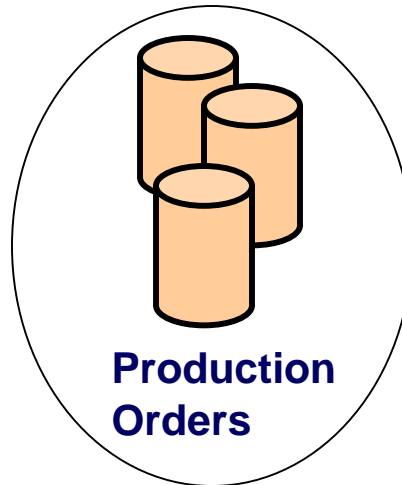
The main area displays a table with the following data:

Hierarchy	Description	Summarize	Prio.	Status sel.	Sel. varia
Z003	Internal Orders	<input type="checkbox"/>	1		
Z003	Maintenance/Service Orders	<input type="checkbox"/>	2		
Z003	Prod. Orders, QM Orders, Prod. Cost Co...	<input checked="" type="checkbox"/>	3	ZDLV	
Z003	Projects	<input type="checkbox"/>	4		
Z003	Sales Orders Without Dependent Orders	<input type="checkbox"/>	5		
Z003	Sales Orders with Dependent Orders	<input type="checkbox"/>	6		

CO-PC Analysis – Reporting Options

Summarization Hierarchy

- Good for origin analysis
- Two views: Hierarchical and cost/quantity
- No variance categories at hierarchy level



Cost Center

- Overhead and labor analysis
- Confirmation activity
- Custom Painter reports using CCSS

Drill-Down Reporting

- Great variance analysis tool
- Slice-and-dice effect
- Lacking in its ability to provide origin source detail

Other Reports and Tools

- Order Selection
- Report Painter using KKBC, KKBE, KKBU, CCSS

- *Configuring SAP R/3 FI/CO*, Sybex 2000 – David Nowak and Quentin Hurst
- *Product Costing Made Easy* (good configuration guidance) – SAP
- *FI/CO Expert*

7 Key Points to Take Home!

- Proper variance analysis begins with a well-configured costing system
- Keep the month-end processes in mind when designing the system
- Remember the impacts shop floor activity has on your ability to analyze variance
- Leverage the multiple tools SAP provides
- Expand your working knowledge of SAP's controlling tables/structures

7 Key Points to Take Home! (cont.)

- Partner with your plant personnel for successful process and report development
- Above all, think outside the box

Your Turn!



Questions?

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