

SAP PP

ISSUE & RESOLUTION

SAMPLE COPY • 10 REAL-TIME ISSUES & RESOLUTIONS

Basic Data • MRP • PP-PI • REM • Shop Floor Control • SOP

SAP PP MODULE • BASIC DATA (BOMS / ROUTINGS / WORK CENTERS)**1. Interview Explanation – S/4HANA Production Order Fails (Missing Production Version)****ISSUE**

If the interviewer asks:

“How did you troubleshoot a scenario after migrating to S/4HANA where MRP and Production Order creation completely failed for an existing manufactured product?”

You can explain like this:

BUSINESS SCENARIO

Following a migration from ECC to S/4HANA, the production planning team tried to create a standard production order (CO01) for a flagship material. However, the system threw a hard error: "No valid production version found." The planners were confused because they never used Production Versions in ECC; they only used basic BOMs and Routings.

Because of this:

- ✓ Production was halted for key materials
- ✓ MRP runs (MD01N) failed to generate planned orders for in-house production

STEP 1: VERIFY THE ERROR AND MASTER DATA

First, I checked the existing master data to ensure the components were intact.

Checked in:

CS03 (BOM) & CA03 (Routing)

Verified:

- ✓ The BOM existed and was valid (Status 1).
- ✓ The Routing existed and was released (Status 4).

STEP 2: EXPLAIN THE S/4HANA ARCHITECTURE SHIFT

Then, I explained the architectural change to the PP team.

Because of this:

In legacy SAP ECC, the system could automatically select a BOM and Routing based on Selection IDs in configuration (OPL8 / OS30). However, in SAP S/4HANA, Production Versions are 100% mandatory for all in-house manufacturing. A Production Version acts as the required bridge that legally binds a specific BOM alternative to a specific Routing.

STEP 3: CHECK PRODUCTION VERSION (C223)

Next, I checked if the bridge was created.

Checked in:

C223 (or S/4HANA Fiori App: Manage Production Versions)

Found issue:

- ✗ No Production Version existed for the material/plant combination.

RESOLUTION**FINAL RESOLUTION**

After correcting:

- ✓ I instructed the master data team to execute transaction C223 (or use the background migration program CS20 / CS_BOM_PRODVER_MIGRATION02).
- ✓ We created a Production Version (e.g., '0001'), assigned the correct Alternative BOM and Routing Group, and clicked the "Check" button.
- ✓ The system validated the dates and lot sizes, and the status turned Green.

Once saved, the PP planners ran CO01 again, and the Production Order was successfully generated, reading the newly locked Production Version.

KEY LEARNING

In SAP S/4HANA:

Order creation failures for in-house products usually happen due to:

- ✗ Missing Production Versions (Mandatory in S/4HANA)
- ✗ Production Versions existing but stuck in an invalid status (Red light)
- ✗ Lot sizes in the Production Version not matching the order quantity

—not system failure.

As a Functional Consultant, important thing is:

✓ Instantly recognize "No valid production version" as the fundamental difference between ECC and S/4HANA manufacturing master data.

STRONG INTERVIEW ENDING

“The production team thought the system was broken because ECC never required this step. I explained that S/4HANA architecture mandates a Production Version to bridge BOMs and Routings. By creating and validating the Production Version in C223, I instantly unblocked MRP and production order creation.”

SAP PP MODULE • BASIC DATA (BOMS / ROUTINGS / WORK CENTERS)**2. Interview Explanation – Work Center Scheduling Calculates as Zero Days****ISSUE**

If the interviewer asks:

“How did you troubleshoot an issue where a production order was scheduled, but a critical machine operation calculated a duration of exactly 0 hours?”

You can explain like this:

BUSINESS SCENARIO

A production planner ran scheduling for a production order. Operation 0020 (CNC Machining) was supposed to take 8 hours. However, the system calculated the execution time as 0 hours. Consequently, the start date and end date for that operation were scheduled at the exact same minute.

Because of this:

- ✓ Capacity planning (CM01) was completely blind to the machine load
- ✓ Production dates promised to sales were wildly inaccurate

STEP 1: VERIFY ROUTING STANDARD VALUES

First, I checked the routing to ensure the planners actually entered the time.

Checked in:

CA03 -> Operation Details -> Standard Values

Verified:

- ✓ Machine Time: 8 Hours

Found issue:

- ✓ The master data value was present. The issue was in the calculation engine.

STEP 2: CHECK WORK CENTER SCHEDULING TAB

Then, I checked the Work Center to see how it interprets those 8 hours.

Checked in:

CR03 (Display Work Center) -> Scheduling tab

Verified:

- ✓ Capacity Category: 001 (Machine)

Found issue:

- ✗ The "Execution Formula" field at the bottom of the Scheduling tab was completely blank.

STEP 3: ANALYZE THE FORMULA DISCONNECT

Because of this:

In SAP PP, entering "8 Hours" in a routing means nothing unless the Work Center has a mathematical formula telling it what to do with that number (e.g., standard formula SAP002: Machine Time * Operation Quantity / Base Quantity). Because the formula was blank, SAP multiplied the routing time by zero.

RESOLUTION**FINAL RESOLUTION**

After correcting:

- ✓ Went into CR02 to edit the Work Center.
- ✓ Navigated to the Scheduling tab.
- ✓ Assigned the standard mathematical formula SAP002 (or a custom Z formula) to the Execution Formula field.
- ✓ Clicked the "Test Formula" button to ensure it compiled correctly.

When the planner went back to the production order (CO02) and hit "Read PP Master Data" to recalculate, Operation 0020 accurately stretched out to consume 8 hours on the planning board.

KEY LEARNING

In SAP PP:

Zero-duration operations usually happen due to:

- ✗ Missing Scheduling Formulas in the Work Center (CR02)
- ✗ Missing Capacity Formulas in the Work Center (Capacity tab)
- ✗ Control Keys that are not relevant for scheduling

—not system failure.

As a Functional Consultant, important thing is:

- ✓ Routines hold the variables (the numbers). Work Centers hold the formulas (the math). Both must exist for scheduling to work.

STRONG INTERVIEW ENDING

“After confirming the routing had the correct 8-hour value, I checked the Work Center's scheduling parameters. I found that the Execution Formula was completely blank. By assigning the standard SAP002 formula, I gave the system the mathematical equation it needed to translate the routing time into an accurate production schedule.”

SAP PP MODULE • MATERIAL REQUIREMENTS PLANNING (MRP)

3. Interview Explanation – MRP Live (MD01N) Ignoring Custom BAdIs

ISSUE

If the interviewer asks:

“How did you troubleshoot a scenario in S/4HANA where the nightly MRP run completely ignored a custom business rule for lot sizing or material substitution?”

You can explain like this:

BUSINESS SCENARIO

In SAP ECC, the client had a custom ABAP BAdI (MD_ADD_ELEMENTS or MD_MODIFY_PRODVERS) that executed complex logic to substitute components during the MRP run. After migrating to S/4HANA, the production planners noticed that the nightly MRP run was completely ignoring this custom logic. It was defaulting to standard SAP behavior and pulling the wrong components.

Because of this:

- ✓ The warehouse was staging obsolete raw materials
- ✓ Production orders had to be manually reworked every morning

STEP 1: VERIFY THE MRP EXECUTION METHOD

First, I checked how the nightly batch job was being executed in S/4HANA.

Checked in:

SM37 (Background Jobs)

Verified:

- ✓ The background job was using MD01N (MRP Live), which is the standard S/4HANA transaction, instead of classic MD01.

STEP 2: ANALYZE THE S/4HANA ARCHITECTURE

Then, I explained the technical shift to the business and ABAP teams.

Because of this:

Classic MRP (MD01) runs on the ABAP application server, processing materials row by row and triggering classic ABAP BAdIs.

MRP Live (MD01N) pushes the massive data calculations down into the HANA Database layer to run 10x faster. Because the calculation executes in the database, it physically cannot trigger traditional ABAP application-layer BAdIs. It bypasses them entirely.

STEP 3: CHECK PLANNING FILE EXCEPTIONS

Next, I needed to check if this specific material was forced to run in ABAP or HANA.

Checked in:

Transaction MD_MRP_FORCE_CLASSIC (or report PPH_SETUP_MRPRECORDS)

Found issue:

- ✗ The material was running in HANA, meaning the custom BAdI was blind to it.

RESOLUTION

FINAL RESOLUTION

After correcting:

- ✓ I presented two architectural solutions to the business:
- ✓ Option A (Short-Term): I used transaction MD_MRP_FORCE_CLASSIC to explicitly flag these specific materials to always run using "Classic MRP" logic during the MD01N run. This sacrificed a bit of speed but instantly restored the custom BAdI logic.
- ✓ Option B (Long-Term/Best Practice): I worked with a HANA-certified developer to rewrite the legacy ABAP BAdI into an AMDP (ABAP Managed Database Procedure). This allowed the custom business rule to execute directly inside the HANA database, maintaining the blazing speed of MRP Live.

KEY LEARNING

In SAP S/4HANA PP:

Ignored custom MRP logic usually happens due to:

✗ MD01N bypassing classic ABAP BAdIs by pushing execution to the HANA DB layer

✗ Custom code not being refactored for AMDP

—not system failure.

As a Functional Consultant, important thing is:

✓ MRP Live is a fundamentally different processing engine. You must audit all custom PP enhancements during an S/4HANA migration to see what will survive in HANA.

STRONG INTERVIEW ENDING

“When the business complained that S/4HANA was ignoring their custom component substitution logic, I identified the architectural shift. Because they were using MRP Live (MD01N), the calculations were executing in the HANA database, completely bypassing their legacy ABAP BAdIs. By forcing the specific materials to run in classic mode temporarily, and eventually rewriting the logic as an AMDP, we restored the business rules while protecting system performance.”

SAP PP MODULE • MATERIAL REQUIREMENTS PLANNING (MRP)**4. Interview Explanation – Firming (Planning Time Fence) Ignored****ISSUE**

If the interviewer asks:

“How did you troubleshoot a scenario where MRP kept aggressively changing the dates and quantities of production orders planned for next week?”

You can explain like this:

BUSINESS SCENARIO

The production manager was furious. The shop floor finalizes their production schedule every Friday for the upcoming 7 days. However, when the nightly MRP job ran over the weekend, it deleted, moved, and changed the quantities of the planned orders for Monday and Tuesday to react to new sales orders.

Because of this:

- ✓ The shop floor schedule was highly unstable
- ✓ Raw materials staged for Monday's work were suddenly no longer needed
- ✓ Machine changeover plans were ruined

STEP 1: VERIFY MRP DEMAND IN MD04

First, I checked the Stock/Requirements List to observe the volatility.

Checked in:

MD04

Verified:

- ✓ The Planned Orders for next week lacked an asterisk (*).

Found issue:

- ✗ The orders were un-firmed, meaning MRP had full mathematical authority to delete or shift them to meet new demand.

STEP 2: CHECK MATERIAL MASTER (MRP 1 VIEW)

Then, I checked the master data rules governing how this material protects its near-term schedule.

Checked in:

MM03 -> MRP 1 View

Verified:

- ✓ Looked at the "MRP Type" field.

Found issue:

- ✗ The MRP Type was set to 'PD' (Standard MRP).

Because of this:

MRP Type 'PD' is highly reactive. It does not respect "frozen zones." It will alter any un-firmed procurement proposal across the entire timeline.

STEP 3: CHECK PLANNING TIME FENCE

I also checked the "Planning time fence" field on the same screen.

Found issue:

- ✗ It was either blank or, because the MRP Type was 'PD', the time fence was mathematically ignored.

RESOLUTION**FINAL RESOLUTION**

After correcting:

- ✓ Held an alignment meeting with the Supply Chain manager. They confirmed they wanted a strict 7-day frozen window where standard MRP could not touch the schedule.
- ✓ Updated the Material Master (MM02).

✓ Changed the MRP Type from 'PD' to 'P1' (MRP, fixing type 1).

✓ Set the "Planning time fence" to 7 Days.

When MRP (MD01N) ran that night, it automatically placed a firming asterisk (*) on every planned order within the next 7 days. Any new sales demand that dropped in was automatically scheduled by MRP outside the 7-day fence, perfectly preserving the shop floor's short-term schedule.

KEY LEARNING

In SAP PP:

Schedule volatility within the near-term execution window usually happens due to:

✗ Using MRP Type 'PD' instead of a firming type ('P1', 'P2', 'P3')

✗ Missing days in the "Planning time fence" field

✗ Planners failing to manually firm orders

—not system failure.

As a Functional Consultant, important thing is:

✓ Standard 'PD' creates chaos on the physical shop floor. 'P1' acts as a protective shield between automated planning and physical execution.

STRONG INTERVIEW ENDING

"The shop floor supervisors were frustrated that MRP kept scrambling their finalized weekly schedules. I analyzed the Material Master and found they were using standard 'PD' MRP, which is highly reactive and lacks a frozen zone. Changing the MRP Type to 'P1' and setting a 7-day Planning Time Fence forced the system to automatically firm near-term orders, instantly stabilizing the shop floor."

SAP PP MODULE • PROCESS INDUSTRIES (PP-PI)

5. Interview Explanation – Control Recipe / PI Sheet Fails to Generate

ISSUE

If the interviewer asks:

“How did you troubleshoot a scenario where a Process Order was released, but the operators on the shop floor never received their PI Sheet?”

You can explain like this:

BUSINESS SCENARIO

A pharmaceutical company uses browser-based PI Sheets to guide operators through the chemical mixing process. The production planner created and released a Process Order (COR2). Status was 'REL'. However, when the shop floor operator opened transaction CO53 (or the Fiori App for PI Sheets), the document was completely missing.

Because of this:

- ✓ The mixing process was completely halted
- ✓ Standard Operating Procedures (SOPs) and compliance checks could not be executed

STEP 1: VERIFY CONTROL RECIPE STATUS

First, I checked the Process Order to see if the system even attempted to generate the instruction set.

Checked in:

COR3 -> Header -> Status

Verified:

- ✓ System Status: REL (Released).

Found issue:

- ✗ The status CRCR (Control Recipe Created) was entirely missing.

STEP 2: CHECK THE MASTER RECIPE (PHASE LEVEL)

Then, I checked the master data that bridges the process order to the PI Sheet.

Checked in:

C203 (Master Recipe)

Verified:

- ✓ Operation Overview -> Phase level.

Found issue:

- ✗ I looked at the "Control Recipe Destination" field on the specific mixing Phase (e.g., Phase 0020). The field was completely blank.

STEP 3: ANALYZE CONTROL RECIPE DESTINATION ARCHITECTURE

Because of this:

In discrete manufacturing, releasing an order simply allows printing. In Process Industries (PP-PI), the system must know where to send the electronic instructions (e.g., to an external MES system, to an ABAP list, or to a browser-based PI sheet).

Because the destination field was blank in the Master Recipe, standard SAP simply released the order but silently aborted the creation of the electronic instructions.

RESOLUTION

FINAL RESOLUTION

After correcting:

- ✓ Instructed the Master Data team to update the Master Recipe in C202.
- ✓ Assigned the correct Control Recipe Destination (e.g., destination '04' for Browser-Based PI Sheet) to the relevant Phase.
- ✓ The planner then executed "Read PP Master Data" on the open Process Order to pull in the new Phase data.

Upon re-releasing the order, the system successfully generated the control recipe, the status flipped to CRCR, and the PI Sheet instantly populated on the operator's dashboard.

KEY LEARNING

In SAP PP-PI:

Missing PI Sheets usually happen due to:

- ✗ Missing "Control Recipe Destination" in the Master Recipe phase
- ✗ Destination configured incorrectly in customizing (O10C)
- ✗ XSteps status not set to "Released" in the master recipe

—not system failure.

As a Functional Consultant, important thing is:

- ✓ The Phase is the anchor for PP-PI execution. If the phase doesn't know its destination, the operator gets no instructions.

STRONG INTERVIEW ENDING

“The shop floor was completely blocked because the electronic PI Sheet failed to generate upon order release. I traced the issue from the missing CRCR order status directly back to the Master Recipe. I discovered the engineers had omitted the Control Recipe Destination on the phase level. Populating this single field instantly mapped the execution path and restored the shop-floor instructions.”

SAP PP MODULE • PROCESS INDUSTRIES (PP-PI)

6. Interview Explanation – Material Quantity Calculation (MQC) Ignored

ISSUE

If the interviewer asks:

“How did you troubleshoot a scenario where the Active Pharmaceutical Ingredient (API) batch had a lower potency, but the process order failed to adjust the required quantity of the filler material?”

You can explain like this:

BUSINESS SCENARIO

In a chemical blending process, the recipe requires exactly 100 KG of Active Ingredient (API). If the API batch received from the vendor is 100% potent, the formula requires 50 KG of Water (Filler).

The warehouse allocated an API batch that was only 80% potent. To maintain the chemical balance, the system should have automatically increased the API quantity and decreased the Water quantity.

Instead, the Process Order stubbornly demanded the standard 100 KG of API and 50 KG of Water.

Because of this:

- ✓ The chemical mix failed quality testing (wrong concentration)
- ✓ Thousands of dollars of raw materials were scrapped

STEP 1: VERIFY BATCH DETERMINATION

First, I checked if the system knew the batch was weak.

Checked in:

COR3 -> Component Overview -> Batch Allocation

Verified:

- ✓ The batch was allocated.
- ✓ Checked MSC3N: The Batch Characteristic for "Potency" was indeed evaluated at 80%.

STEP 2: CHECK MATERIAL QUANTITY CALCULATION (MQC) FORMULA

Then, I checked the mathematical bridge inside the recipe.

Checked in:

C203 -> Header -> Click "Material Quantity Calculation" (MQC) icon

Verified:

- ✓ The screen opened showing the components.

Found issue:

✗ The formula for the Water component simply said = 50. It was hardcoded. The chemical engineers had documented the dynamic scaling rule in a PDF, but they never actually built the mathematical formula in the SAP Master Recipe.

STEP 3: ANALYZE MQC LOGIC

Because of this:

Standard SAP BOMs are rigidly proportional. If you want SAP to dynamically alter component B based on the exact batch characteristic of component A, you MUST write a formula in the MQC screen.

RESOLUTION

FINAL RESOLUTION

After correcting:

- ✓ Went into the Master Recipe (C202).
- ✓ Opened the Material Quantity Calculation screen.
- ✓ Wrote an explicit formula for the Water component line (e.g., $\text{Water_Qty} = \text{Base_Qty} - (\text{API_Qty} * (\text{API_Potency_Characteristic} / 100))$).
- ✓ Saved the recipe.

When the planner created a new process order and executed Batch Determination for the 80% potent API, the MQC engine instantly fired in the background, recalculated the ratios, and reduced the required water quantity precisely to balance the formula.

KEY LEARNING

In SAP PP-PI:

Dynamic recipe failures usually happen due to:

- ✗ Missing mathematical formulas in the MQC screen (C202)
- ✗ Batch characteristics missing from the active batch master (MSC3N)
- ✗ The formula syntax referencing the wrong component line ID

—not system failure.

As a Functional Consultant, important thing is:

✓ MQC is the ultimate superpower of PP-PI over discrete manufacturing. It turns static BOMs into intelligent, chemically balanced algorithms.

STRONG INTERVIEW ENDING

“The production team ruined a chemical batch because the process order failed to dynamically adjust for a low-potency raw material. I investigated the Master Recipe and found the Material Quantity Calculation (MQC) formulas were completely missing. By embedding the chemical balancing formula directly into the MQC screen, we automated the adjustments, ensuring perfect batch consistency regardless of raw material variances.”

SAP PP MODULE • REPETITIVE MANUFACTURING (REM)

7. Interview Explanation – MFBF Fails: "Product Cost Collector Does Not Exist"

ISSUE

If the interviewer asks:

"How did you troubleshoot a scenario where a shop floor user tried to execute a backflush in MFBF, but the system threw a hard stop regarding missing costs?"

You can explain like this:

BUSINESS SCENARIO

During the Go-Live of a new high-volume production line, an operator opened transaction MFBF (REM Backflush) to record the production of 500 units. When they hit save, SAP threw a hard red error: "Product Cost Collector for material XXXX does not exist." The backflush was entirely blocked.

Because of this:

- ✓ Finished goods could not enter inventory
- ✓ The production line was effectively halted on day one

STEP 1: VERIFY THE BACKFLUSH ERROR

First, I checked the exact parameters the user entered in MFBF.

Checked in:

MFBF -> Enter Material, Plant, and Production Version

Found issue:

- ✓ The system explicitly failed during the financial validation phase.

STEP 2: UNDERSTAND REM COSTING ARCHITECTURE

Then, I explained the fundamental difference between Discrete and Repetitive manufacturing to the production team.

Because of this:

In Discrete manufacturing (CO01), every single Production Order acts as its own unique financial bucket to collect costs. In Repetitive Manufacturing, there are no physical orders. You produce continuously. Therefore, FI/CO requires a permanent, monthly financial bucket to absorb the daily backflushes. This is called the Product Cost Collector (PCC). Standard SAP legally prevents any REM backflush if this bucket is missing.

STEP 3: CHECK PRODUCT COST COLLECTOR STATUS

Next, I checked if the finance team had created the bucket.

Checked in:

KKF6N (or PKBC for mass processing)

Verified:

- ✓ Entered the Material, Plant, and Production Version.

Found issue:

- ✗ The system confirmed no Product Cost Collector existed for this combination.

RESOLUTION

FINAL RESOLUTION

After correcting:

- ✓ This requires a quick, mandatory FI/CO master data step.
- ✓ I instructed the Cost Accountant to open KKF6N.
- ✓ They created the Product Cost Collector for the Material/Plant/Production Version.
- ✓ Crucially, they clicked the "Cost" button (Preliminary Costing) to establish the baseline target costs, and saved the collector.

The moment KKF6N was saved, the operator returned to MFBF, hit save, and the 500 units successfully posted to inventory, routing the costs perfectly into the newly created bucket.

KEY LEARNING

In SAP PP-REM:

Backflush blocks due to costing usually happen due to:

- ✗ Missing Product Cost Collector (KKF6N)
- ✗ PCC exists, but the "Preliminary Cost Estimate" was never executed
- ✗ Production Version was changed, but the PCC was not updated to match
—not system failure.

As a Functional Consultant, important thing is:

- ✓ In REM, PP cannot exist without CO. The Product Cost Collector is the absolute prerequisite for any goods movement in MFBF.

STRONG INTERVIEW ENDING

“The shop floor was completely blocked from backflushing on Go-Live day due to a Product Cost Collector error. I realized the finance team had not initialized the monthly cost buckets required for Repetitive Manufacturing. By guiding the cost accountant to create and cost the PCC in KKF6N, I established the financial bridge, instantly unblocking the MFBF execution.”

SAP PP MODULE • REPETITIVE MANUFACTURING (REM)

8. Interview Explanation – MRP Generates Standard Planned Orders Instead of RSQ

ISSUE

If the interviewer asks:

“How did you troubleshoot a scenario where MRP was supposed to plan a Repetitive Manufacturing line, but it created discrete planned orders that couldn't be backflushed?”

You can explain like this:

BUSINESS SCENARIO

A company transitioned a product from Discrete to Repetitive Manufacturing. The planner ran MRP (MD01N). However, when they looked at MD04, standard Planned Orders were generated (Order Profile 'LA').

When the shop floor went to MFBF to execute production, the system threw an error: "Planned order XXXX is not a run schedule quantity." They could not backflush the production.

Because of this:

- ✓ The lean manufacturing workflow was broken
- ✓ Users were forced to convert orders manually, defeating the purpose of REM

STEP 1: VERIFY MRP OUTPUT IN MD04

First, I checked the planned orders generated by MRP.

Checked in:

MD04 -> Double-click Planned Order -> Details

Verified:

- ✓ Order Profile was 'LA' (Standard Planned Order).

Found issue:

- ✗ For REM, the planned order MUST have the indicator "PE" (Run Schedule Quantity). Without this flag, MFBF cannot consume it.

STEP 2: CHECK MATERIAL MASTER (MRP 4 VIEW)

Then, I checked the master data that controls the material's manufacturing behavior.

Checked in:

MM03 -> MRP 4 View

Verified:

- ✓ Production Versions existed.

Found issue:

- ✗ The "Repetitive mfg" checkbox was completely unticked.
- ✗ The "REM profile" field was blank.

STEP 3: ANALYZE THE ARCHITECTURAL GAP

Because of this:

MRP did exactly what the master data told it to do. Even if you have a valid Rate Routing and a Production Version, if the "Repetitive mfg" flag is not explicitly ticked in the Material Master, MRP will legally treat the material as a discrete item and generate standard 'LA' planned orders.

RESOLUTION

FINAL RESOLUTION

After correcting:

- ✓ Instructed the MDM team to update the Material Master (MM02) -> MRP 4 view.
- ✓ Ticked the "Repetitive mfg" flag.
- ✓ Assigned a valid "REM profile" (e.g., 0001 - Make-to-Stock REM).
- ✓ Deleted the old planned orders and re-ran MRP (MD02).

The new MRP run successfully generated Planned Orders with the "PE" (Run Schedule Quantity) indicator. These immediately populated the REM Planning Table (MF50) and were flawlessly executed in MFBF.

KEY LEARNING

In SAP PP-REM:

Failed generation of Run Schedule Quantities happens due to:

- ✗ Missing "Repetitive mfg" flag in the MRP 4 view
- ✗ Missing "REM Profile" in the MRP 4 view
- ✗ The Production Version not having the "Repetitive mfg allowed" flag ticked

—not system failure.

As a Functional Consultant, important thing is:

- ✓ The "Repetitive mfg" flag is the master switch. It physically transforms a generic planned order into a continuous Run Schedule Quantity.

STRONG INTERVIEW ENDING

“When the shop floor couldn't backflush planned orders in MFBF, I traced the issue back to the MRP generation rules. I discovered the MDM team had neglected to tick the 'Repetitive mfg' flag and assign a REM profile in the Material Master. Activating these fields forced MRP to generate true Run Schedule Quantities, instantly restoring the lean execution flow.”

SAP PP MODULE • SHOP FLOOR CONTROL / DISCRETE MANUFACTURING

9. Interview Explanation – Auto-Goods Receipt (101) Fails on Final Confirmation

ISSUE

If the interviewer asks:

“How did you troubleshoot a scenario where a shop floor worker confirmed the final operation, but the finished good never appeared in inventory?”

You can explain like this:

BUSINESS SCENARIO

In a discrete manufacturing plant, the business process mandates that when an operator confirms the final packaging step (Operation 0050) using transaction CO11N, the system should automatically post a 101 Goods Receipt to place the finished good into the warehouse. However, operators reported that they were confirming orders perfectly, but the inventory balances for the finished goods remained at zero.

Because of this:

- ✓ Finished goods could not be shipped to customers
- ✓ Warehouse clerks were forced to manually run MIGO, risking duplicate entries

STEP 1: VERIFY THE OPERATION CONFIRMATION

First, I checked if the operator actually performed the confirmation.

Checked in:

CO14 (Display Confirmation) / CO03 -> Operation Overview

Verified:

- ✓ Operation 0050 showed system status 'CNF' (Confirmed). Yield quantities were accurately recorded.

STEP 2: CHECK COGI ERROR LOGS

Then I checked if the system tried to post the 101 movement but failed due to a missing storage location or valuation type.

Checked in:

COGI (Postprocessing of Error Records)

Found issue:

- ✗ No errors were listed for the 101 movement. The system didn't fail; it simply never attempted to execute the Goods Receipt.

STEP 3: CHECK THE CONTROL KEY AND SCHEDULING PROFILE

Next, I checked the architectural rules governing automation for that specific order.

Checked in:

CO03 -> Select Operation 0050 -> Operation Details

Verified:

- ✓ Looked at the Control Key (e.g., PP01).

Found issue:

- ✗ The "Auto. goods receipt" checkbox in the Control Key configuration (OP00) was completely unticked.

Alternatively, I checked the Production Scheduling Profile (OPKP) assigned to the material master to see if Auto-GR was triggered globally for the order. It was also unticked.

RESOLUTION

FINAL RESOLUTION

After correcting:

- ✓ Held an alignment meeting with the Production Manager to standardize the automation trigger.
- ✓ Option 1: Updated the Routing (CA02) to use Control Key PP03 (Routing step with Auto-GR) for the final operation.
- ✓ Option 2 (Preferred for consistency): Updated the Production Scheduling Profile in OPKP to enable "Automatic Goods Receipt" upon final confirmation, and ensured this profile was assigned to the Material Master (Work Scheduling view).

When the next order was confirmed, the system successfully triggered the 101 movement in the background, instantly updating the warehouse inventory.

KEY LEARNING

In SAP PP SFC:

Missing Auto-GR usually happens due to:

- ✗ Missing Auto-GR flag in the Control Key (OP00)
- ✗ Missing Auto-GR flag in the Production Scheduling Profile (OPKP)
- ✗ COGI errors blocking the background post (which throws an error, unlike a missing config which fails silently)

—not system failure.

As a Functional Consultant, important thing is:

- ✓ Understand the hierarchy of automation. OPKP governs the whole order; the Control Key governs the specific routing step.

STRONG INTERVIEW ENDING

“The shop floor thought the system was broken because finished goods weren't entering inventory upon final confirmation. By checking the COGI logs, I proved the system wasn't failing—it just hadn't been told to act. I updated the Production Scheduling Profile in OPKP to enable Automatic Goods Receipt, seamlessly bridging the gap between PP confirmation and MM inventory posting.”

SAP PP MODULE • SALES & OPERATIONS PLANNING (SOP)

10. Interview Explanation – SOP Transfer to Demand Management Fails

ISSUE

If the interviewer asks:

“How did you troubleshoot a scenario where a planner finalized their SOP forecast, but the numbers never appeared in Demand Management (MD61) or MRP?”

You can explain like this:

BUSINESS SCENARIO

The Demand Planner spent hours in the Standard SOP planning table (MC87) forecasting a product family for the next 6 months. Once finished, they executed the transfer to Demand Management (MC74). The system gave a success message, but when the Production Planner checked MD04 (Stock/Requirements List), the Planned Independent Requirements (PIRs) were completely missing.

Because of this:

- ✓ Production had no visibility of the 6-month forecast
- ✓ Raw materials were not being ordered by MRP

STEP 1: VERIFY DEMAND MANAGEMENT (MD62)

First, I checked if the PIRs actually existed in the background but were just hidden from MRP.

Checked in:

MD62 (Change Independent Requirements)

Verified:

- ✓ Entered the Material and Plant.

Found issue:

- ✗ The system reported: "No requirements found." The transfer had truly failed to create the records.

STEP 2: CHECK THE SOP TRANSFER PARAMETERS (MC74)

Then I asked the planner to show me exactly how they executed the transfer.

Checked in:

MC74 (Transfer Product Group to Demand Management)

Verified:

- ✓ Selected the Product Group.
- ✓ Selected the correct Plant.

Found issue:

- ✗ Looked at the "Version" and "Active" checkboxes. The planner had transferred SOP Version '01' (which they used for a "what-if" simulation) but forgot to tick the "Active version" checkbox on the transfer screen, OR they failed to specify the correct Requirements Type (e.g., VSF or LSF).

STEP 3: ANALYZE THE ARCHITECTURAL GAP

Because of this:

In SAP, Demand Management strictly requires a "Requirements Type" (like VSF for Strategy 40) to tell MRP how to behave. Additionally, if the PIRs are not explicitly flagged as "Active" during the MC74 transfer, SAP creates them as inactive planning simulations, which are completely invisible to standard MRP (MD01N/MD04).

RESOLUTION

FINAL RESOLUTION

After correcting:

- ✓ Instructed the planner on the correct workflow.
- ✓ Option 1 (Best Practice): Use MC80 to copy their simulation Version '01' to the official Active Version 'A00'.

✓ Option 2: Execute the MC74 transfer again. This time, ensure the "Req. Type" is manually entered as 'VSF' and the "Active" checkbox is ticked.

Once the transfer was executed with the active flag and requirement type, the PIRs instantly populated in MD61 and appeared in MD04, successfully driving the MRP engine.

KEY LEARNING

In SAP PP:

SOP to Demand Management transfer failures usually happen due to:

- ✗ Missing "Active" checkbox during the MC74/MC75 transfer
 - ✗ Missing or incorrect Requirements Type (VSF/LSF) on the transfer screen
 - ✗ Transferring a Product Group but forgetting to run the disaggregation (MC8G) first
- not system failure.

As a Functional Consultant, important thing is:

✓ SOP numbers are just text on a screen until they are legally converted into an active Requirements Type in Demand Management.

STRONG INTERVIEW ENDING

“The planner thought the SOP transfer program was broken because their forecast wasn't hitting MRP. By observing their transfer parameters in MC74, I noticed they were missing the 'Active' flag and the target Requirements Type. Populating these fields instructed the system to generate active PIRs, instantly bridging the gap between high-level forecasting and actionable MRP demand.”