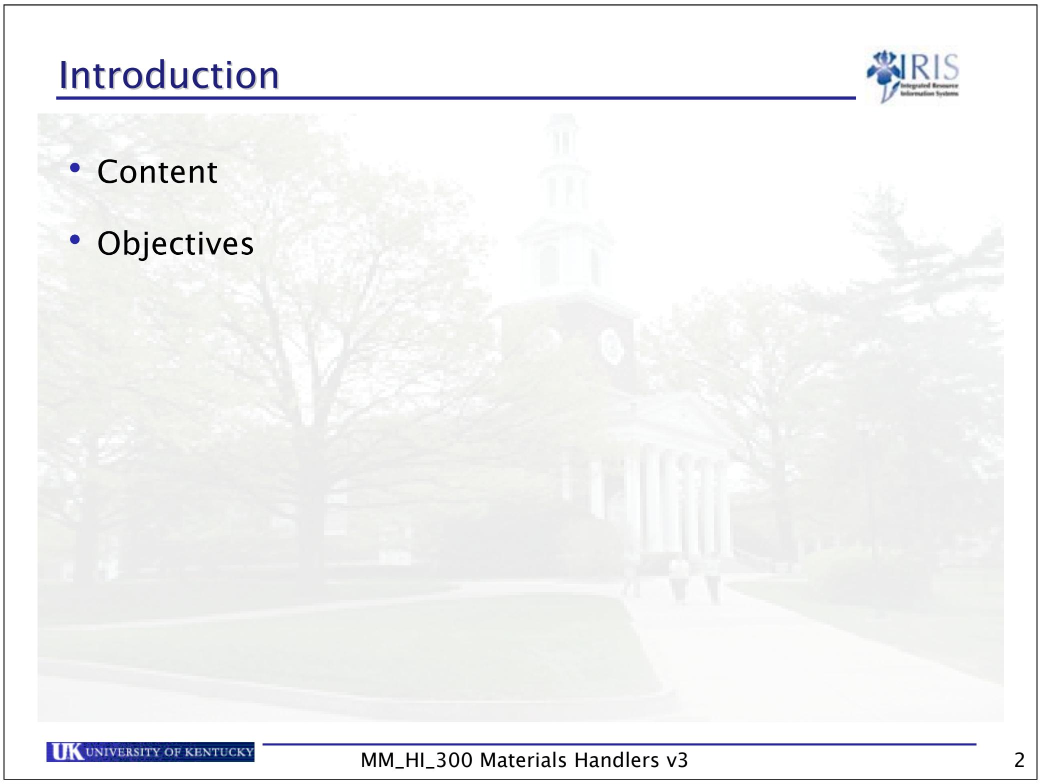
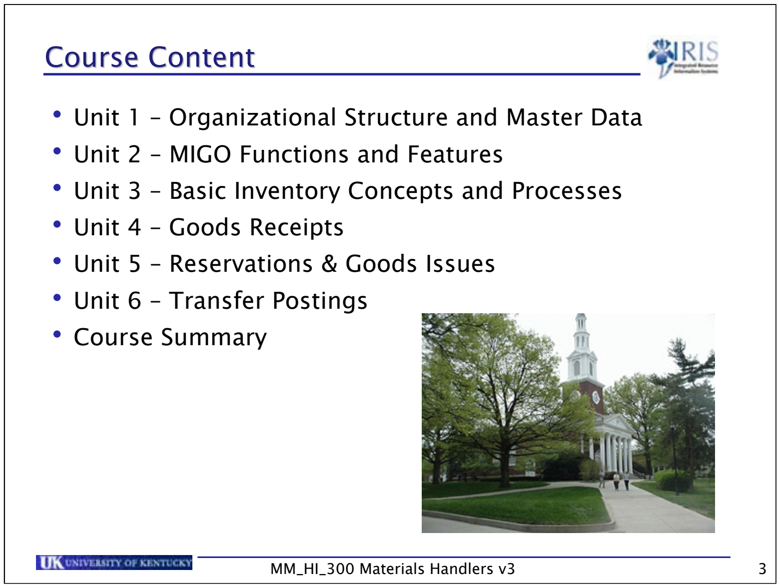
Material Handlers
MM_PM_300

IRIS
Integrated Resource
Information Systems



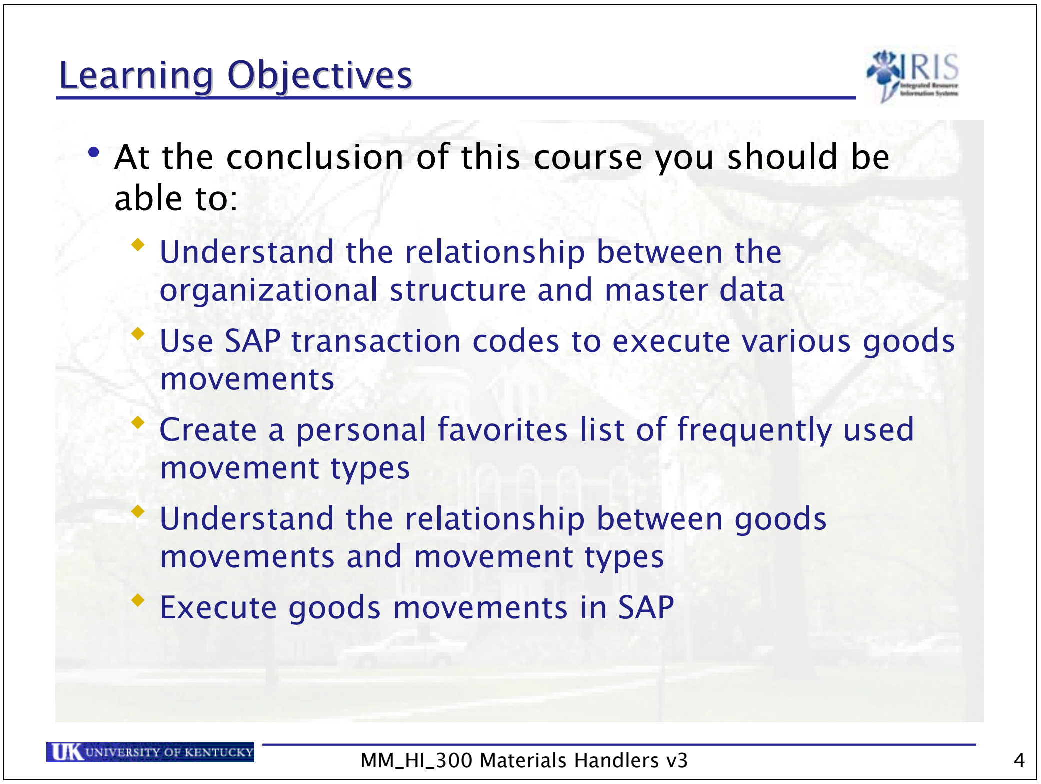
Introduction

- Content
- Objectives



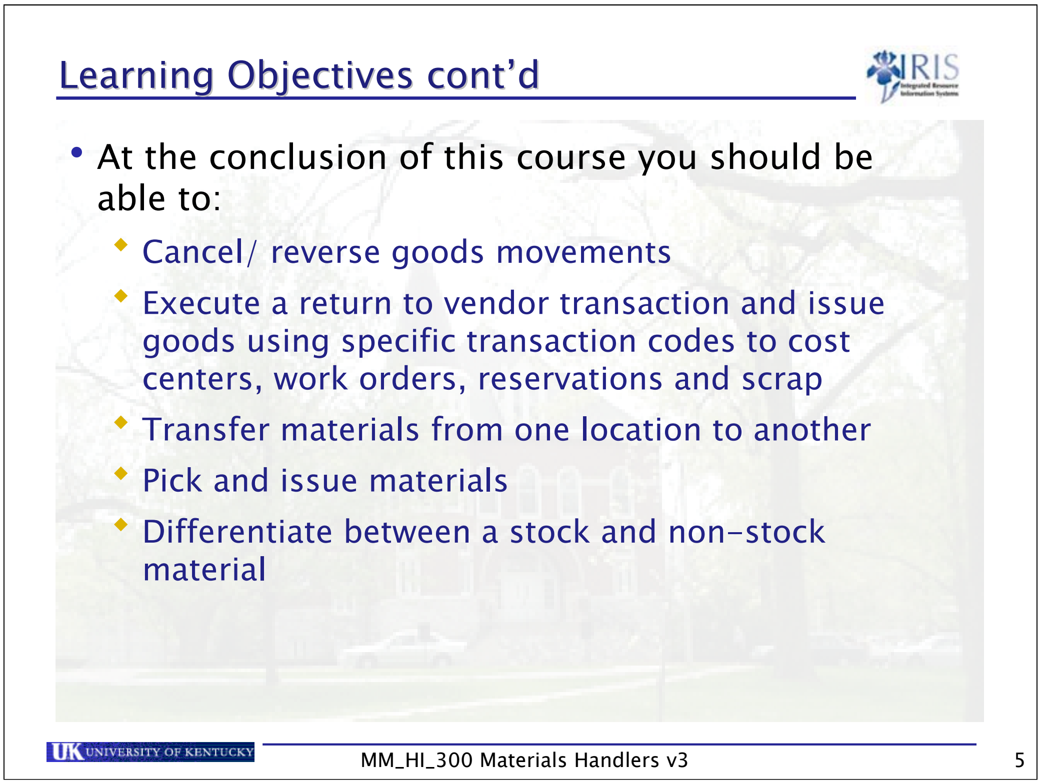
Course Content

- Unit 1 – Organizational Structure and Master Data
- Unit 2 – MIGO Functions and Features
- Unit 3 – Basic Inventory Concepts and Processes
- Unit 4 – Goods Receipts
- Unit 5 – Reservations & Goods Issues
- Unit 6 – Transfer Postings
- Course Summary



Learning Objectives

- At the conclusion of this course you should be able to:
  - Understand the relationship between the organizational structure and master data
  - Use SAP transaction codes to execute various goods movements
  - Create a personal favorites list of frequently used movement types
  - Understand the relationship between goods movements and movement types
  - Execute goods movements in SAP

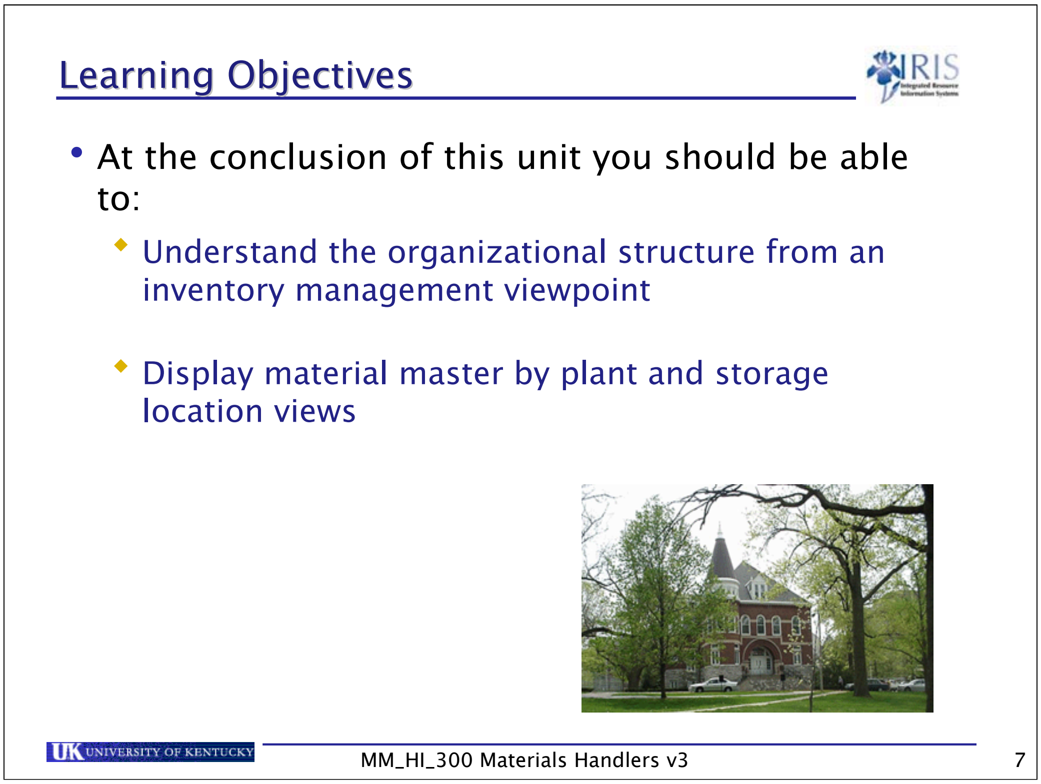


Learning Objectives cont’d

- At the conclusion of this course you should be able to:
  - Cancel/ reverse goods movements
  - Execute a return to vendor transaction and issue goods using specific transaction codes to cost centers, work orders, reservations and scrap
  - Transfer materials from one location to another
  - Pick and issue materials
  - Differentiate between a stock and non-stock material

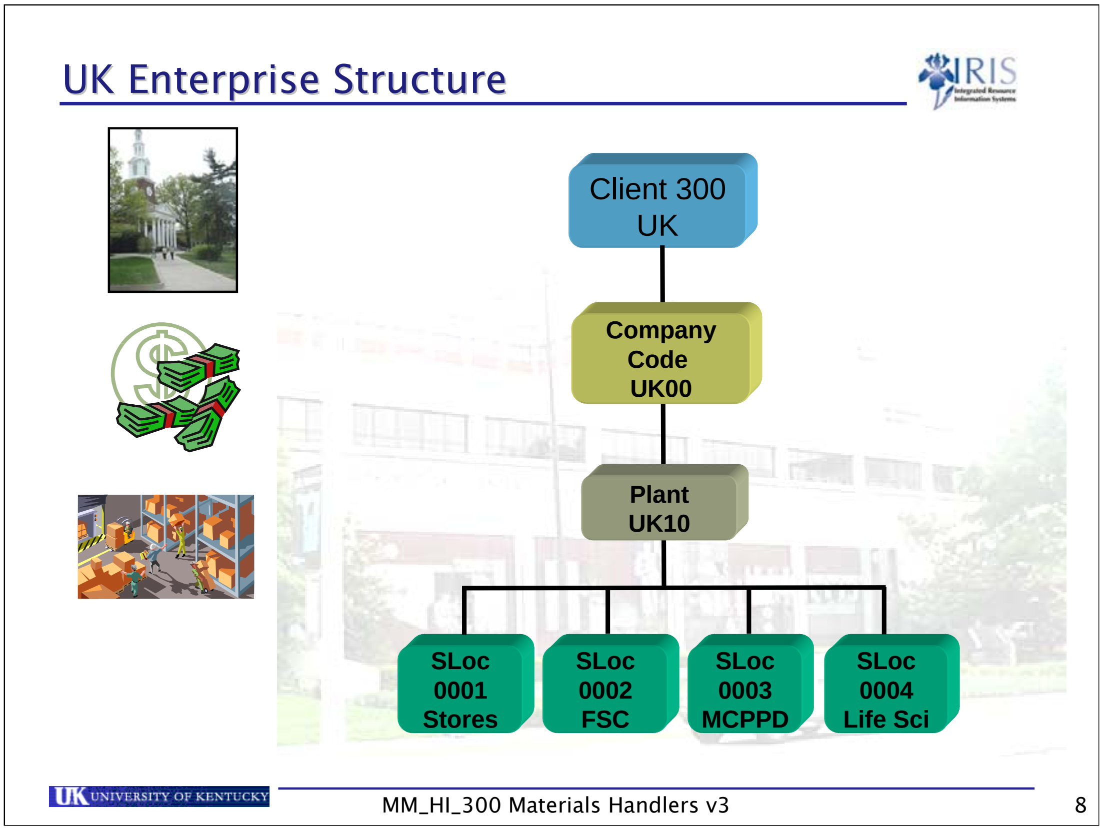
Unit 1

Organizational Structure
and
Material Master



Learning Objectives

- At the conclusion of this unit you should be able to:
  - Understand the organizational structure from an inventory management viewpoint
  - Display material master by plant and storage location views



UK Enterprise Structure

Client 300
UK

Company
Code
UK00

Plant
UK10

SLoc
0001
Stores

SLoc
0002
FSC

SLoc
0003
MCPPD

SLoc
0004
Life Sci

The client is uniquely defined in SAP is a three-digit key or numeric. The SAP client to log into is Client 300. Client 300 represents the University of Kentucky.

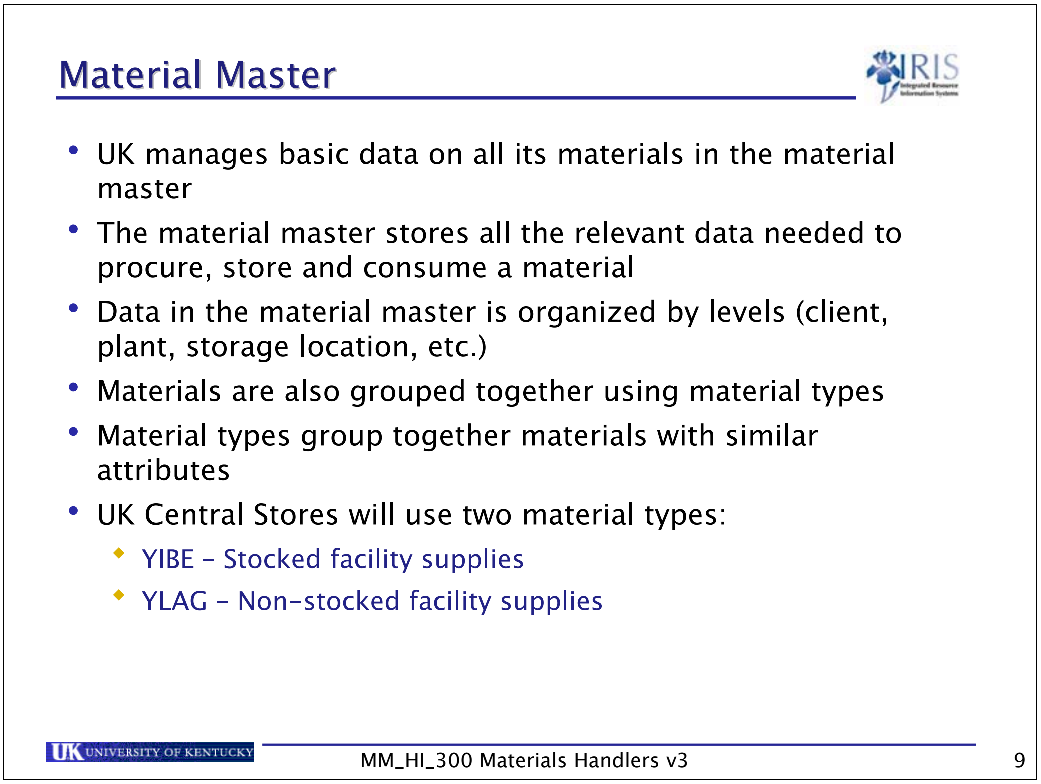
The unique four-digit key in the client defines the company code:

Plant UK10 is assigned to company code UK00

Storage locations represent areas within a plant where inventory is stored:

Storage location 0001 = Central Stores
Storage location 0002 = FSC
Storage location 0003 = Med Ctr PPD
Storage location 0004 = Life Science Combs Building

Storage Locations are plant specific. Storage locations define where inventory is stored within a physical plant



Material Master

- UK manages basic data on all its materials in the material master
- The material master stores all the relevant data needed to procure, store and consume a material
- Data in the material master is organized by levels (client, plant, storage location, etc.)
- Materials are also grouped together using material types
- Material types group together materials with similar attributes
- UK Central Stores will use two material types:
  - YIBE – Stocked facility supplies
  - YLAG – Non-stocked facility supplies

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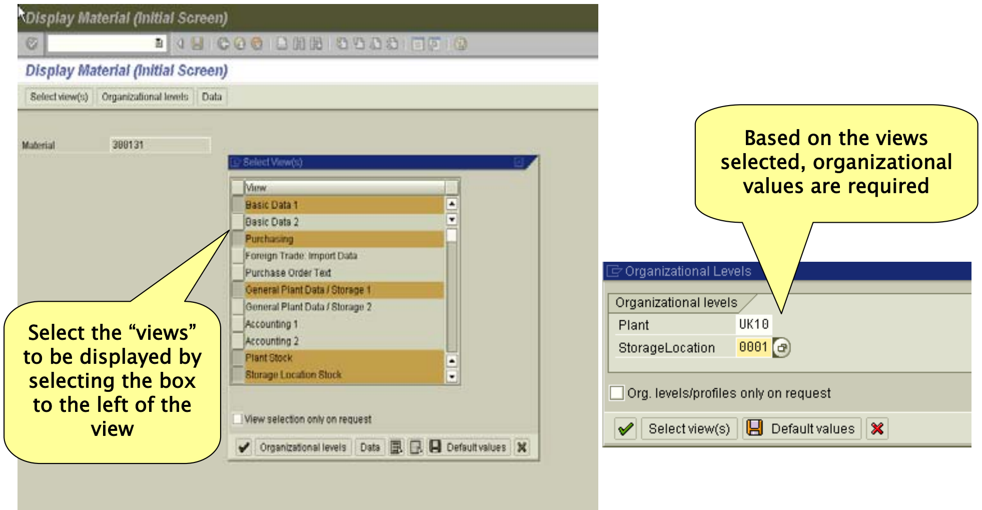
The material master is the central source for data on materials and is used by various modules of SAP.

Display a Material – MM03



Display Material (Initial Screen)

Material 300131

- ▨ Basic Data 1
- ☐ Basic Data 2
- ▨ Purchasing
- ☐ Foreign Trade: Import Data
- ☐ Purchase Order Text
- ▨ General Plant Data / Storage 1
- ☐ General Plant Data / Storage 2
- ☐ Accounting 1
- ☐ Accounting 2
- ▨ Plant Stock
- ▨ Storage Location Stock

☐ View selection only on request

Organizational levels

Plant UK10

StorageLocation 0001

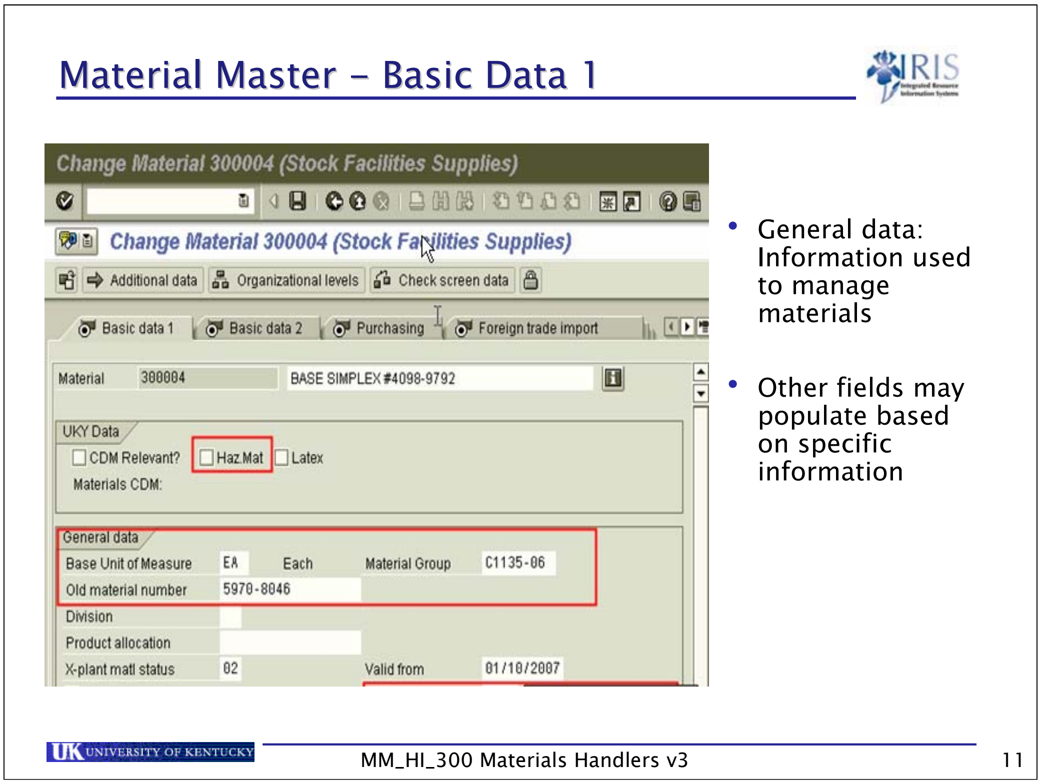
☐ Org. levels/profiles only on request

Select the "views" to be displayed by selecting the box to the left of the view

Based on the views selected, organizational values are required

UK MM Issuers will have access to display information in a material master. This information includes (but is not limited to) the following views:

- Basic Data 1
- Purchasing
- General Plant / Storage 1
- Plant Stock
- Storage Location Stock



Material Master – Basic Data 1

Material 300004 BASE SIMPLEX #4098-9792

UKY Data

☐ CDM Relevant? ☐ Haz.Mat ☐ Latex

Materials CDM:

General data

Base Unit of Measure EA Each Material Group C1135-06

Old material number 5970-8046

Division

Product allocation

X-plant matl status 02 Valid from 01/18/2007

- General data: Information used to manage materials
- Other fields may populate based on specific information

NEEDS ADDRESSED

UKY Data:

this is populated at the time of material creation by hospital purchasing.

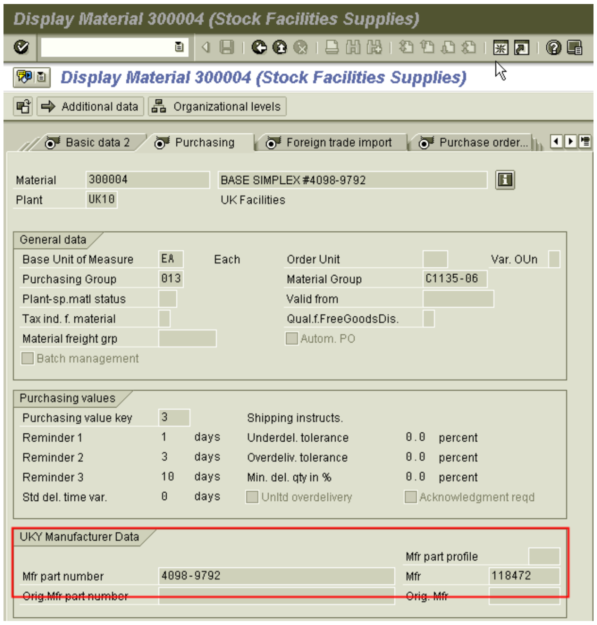
- Patient Chargeable: Indicates whether item is patient chargeable.
- Haz Mat indicator: Identifies if the material is considered a hazardous material
- Latex: Specifies if the material contains latex

General Data:

- General Item Category: This field determines if the material is a Hospital Inventory material or a consignment material. If this field has a value in it (ZCON), the material is a consignment material and must be processed as such.

Material Master – Purchasing View

- The Mfr part number is the actual vendor part number and will be printed on the purchase order



Display Material 300004 (Stock Facilities Supplies)

Material 300004 BASE SIMPLEX #4098-9792
Plant UK10 UK Facilities

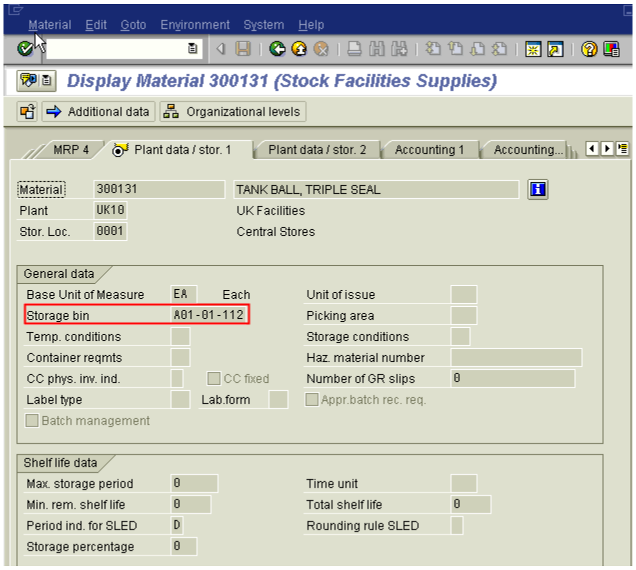
General data
Base Unit of Measure EA Each
Order Unit
Var. OUn
Purchasing Group 013
Material Group C1135-06
Plant-sp.matl status
Valid from
Tax ind. f. material
Qual.f.FreeGoodsDis.
Material freight grp
☐ Autom. PO
☐ Batch management

Purchasing values
Purchasing value key 3
Shipping instructs.
Reminder 1 1 days
Underdel. tolerance 0.0 percent
Reminder 2 3 days
Overdeliv. tolerance 0.0 percent
Reminder 3 10 days
Min. del. qty in % 0.0 percent
Std del. time var. 0 days
☐ Unltd overdelivery
☐ Acknowledgment reqd

UKY Manufacturer Data
Mfr part profile
Mfr part number 4098-9792
Mfr 118472
Orig.Mfr part number
Orig. Mfr

Material Master – Plant/Storage Data 1

- The Storage bin field is used to identify the location of the material in the Storage Location (A01-01-112)



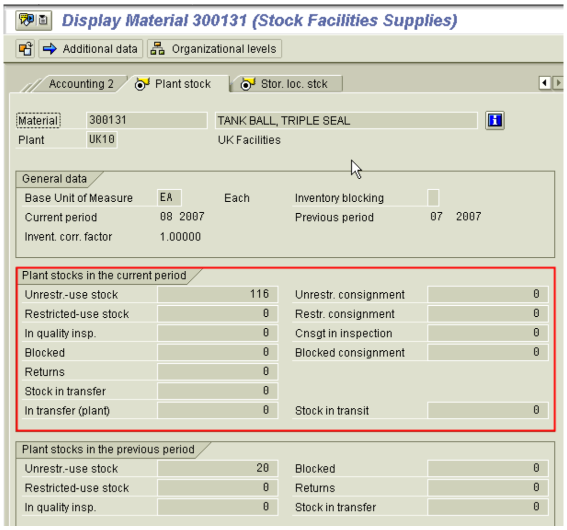
Display Material 300131 (Stock Facilities Supplies)

Material 300131 TANK BALL, TRIPLE SEAL
Plant UK10 UK Facilities
Stor. Loc. 0001 Central Stores

General data
Base Unit of Measure EA Each
Storage bin A01-01-112
Temp. conditions
Container reqmts
CC phys. inv. ind.
☐ CC fixed
Label type
Lab.form
☐ Batch management
Unit of issue
Picking area
Storage conditions
Haz. material number
Number of GR slips 0
☐ Appr.batch rec. req.

Shelf life data
Max. storage period 0
Min. rem. shelf life 0
Period ind. for SLED D
Storage percentage 0
Time unit
Total shelf life 0
Rounding rule SLED

Material Master – Plant Stock



Display Material 300131 (Stock Facilities Supplies)

Material 300131 TANK BALL, TRIPLE SEAL
Plant UK10 UK Facilities

General data

Base Unit of Measure	EA Each	Inventory blocking	☐
Current period	08 2007	Previous period	07 2007
Invent. corr. factor	1.00000		

Plant stocks in the current period

Unrestr.-use stock	116	Unrestr. consignment	0
Restricted-use stock	0	Restr. consignment	0
In quality insp.	0	Cnsgt in inspection	0
Blocked	0	Blocked consignment	0
Returns	0		
Stock in transfer	0		
In transfer (plant)	0	Stock in transit	0

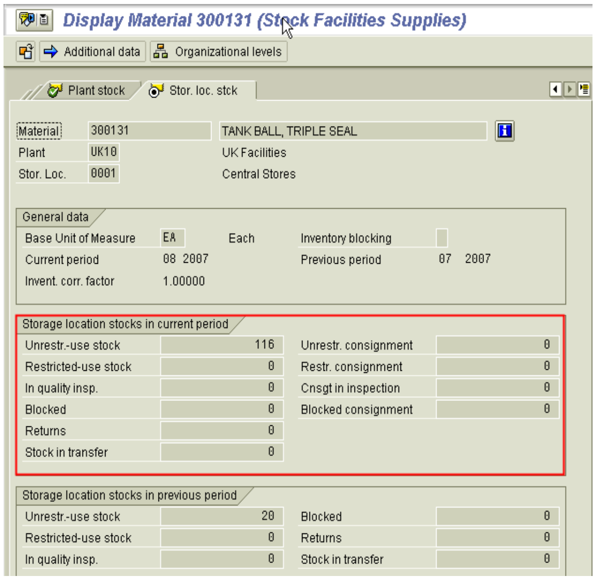
Plant stocks in the previous period

Unrestr.-use stock	20	Blocked	0
Restricted-use stock	0	Returns	0
In quality insp.	0	Stock in transfer	0

- Plant Stock displays the stock situation within the entire plant (UK10)

Plant stock indicated here are for the total between all storage locations.

Material Master – Storage Location Stock



Display Material 300131 (Stock Facilities Supplies)

Material	300131	TANK BALL, TRIPLE SEAL
Plant	UK10	UK Facilities
Stor. Loc.	0001	Central Stores

General data

Base Unit of Measure	EA Each	Inventory blocking	
Current period	08 2007	Previous period	07 2007
Invent. corr. factor	1.00000		

Storage location stocks in current period

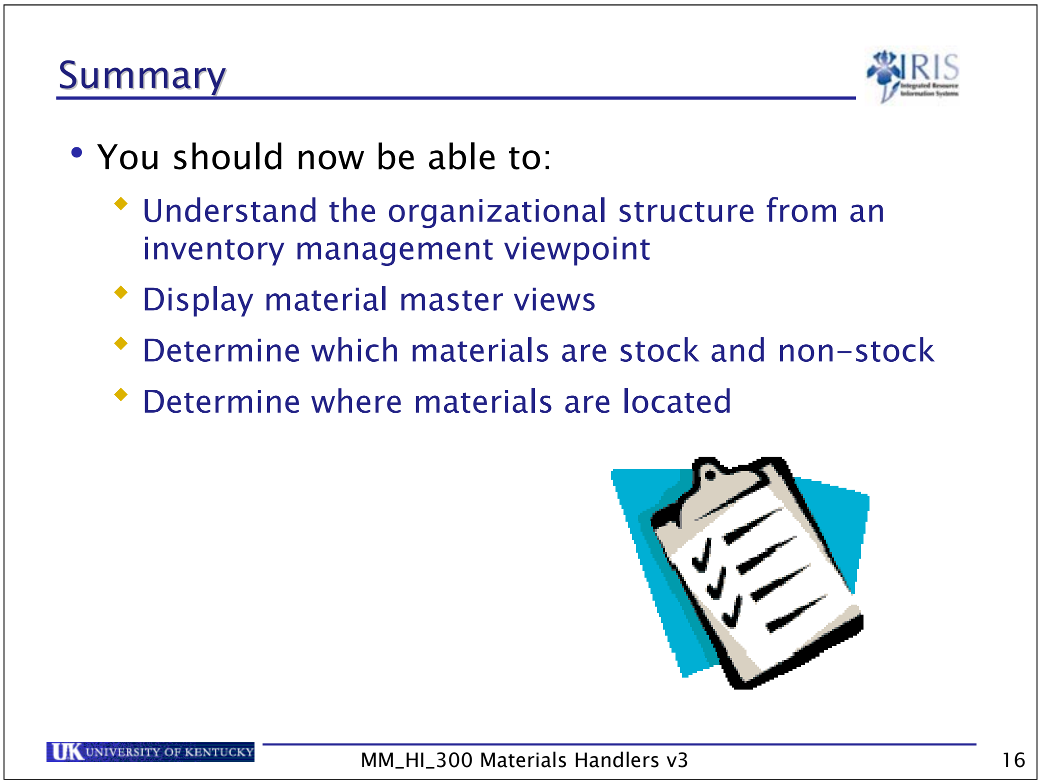
Unrestr.-use stock	116	Unrestr. consignment	0
Restricted-use stock	0	Restr. consignment	0
In quality insp.	0	Cnsgt in inspection	0
Blocked	0	Blocked consignment	0
Returns	0		
Stock in transfer	0		

Storage location stocks in previous period

Unrestr.-use stock	20	Blocked	0
Restricted-use stock	0	Returns	0
In quality insp.	0	Stock in transfer	0

- Storage Location Stock displays the stock available within the storage location (0001)
- Stock in transfer is also displayed
- Change storage location by selecting

  Organizational levels



Summary

- You should now be able to:
  - Understand the organizational structure from an inventory management viewpoint
  - Display material master views
  - Determine which materials are stock and non-stock
  - Determine where materials are located

Unit 2

Inventory Management Overview

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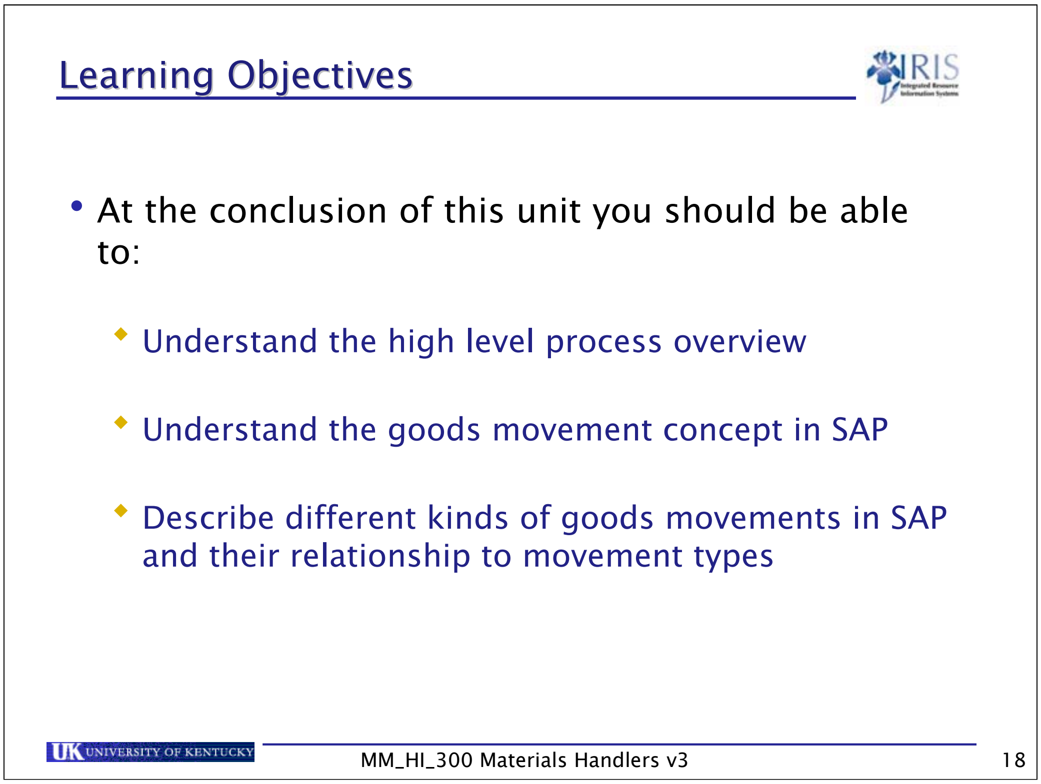
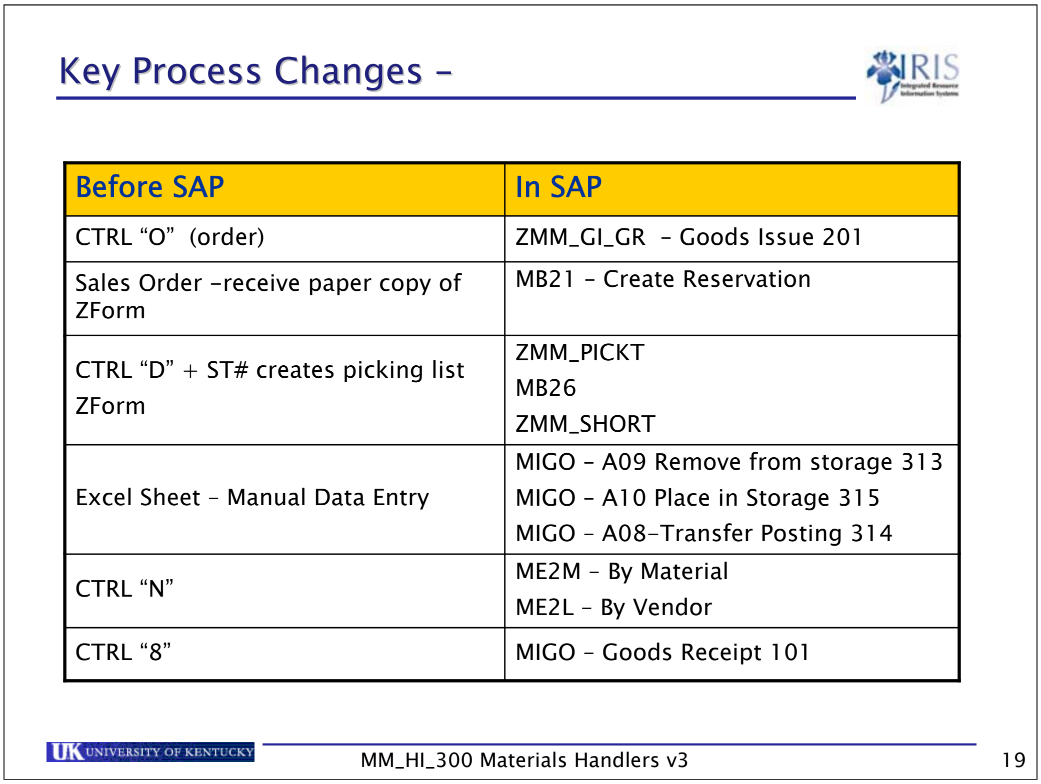


Learning Objectives

- At the conclusion of this unit you should be able to:
  - Understand the high level process overview
  - Understand the goods movement concept in SAP
  - Describe different kinds of goods movements in SAP and their relationship to movement types



Key Process Changes –

Before SAP	In SAP
CTRL "O" (order)	ZMM_GI_GR – Goods Issue 201
Sales Order –receive paper copy of ZForm	MB21 – Create Reservation
CTRL "D" + ST# creates picking list ZForm	ZMM_PICKT MB26 ZMM_SHORT
Excel Sheet – Manual Data Entry	MIGO – A09 Remove from storage 313 MIGO – A10 Place in Storage 315 MIGO – A08–Transfer Posting 314
CTRL "N"	ME2M – By Material ME2L – By Vendor
CTRL "8"	MIGO – Goods Receipt 101

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DEPTREQ = MIGO – Goods Issue Movement Type 201

Individual department charges. Consumption for cost center from Storage Location

DEPTREQ – Consignment = MIGO – Consignment 201K Goods Issue for a consignment

REFILL = MB21 Create request for materials – Storage Location to Storage Location

PROCFORM – FILLSTK = MB26 – Picking Pull supplies from the storage location and stage for delivery to the end using department

Process reservation and create pick tickets.

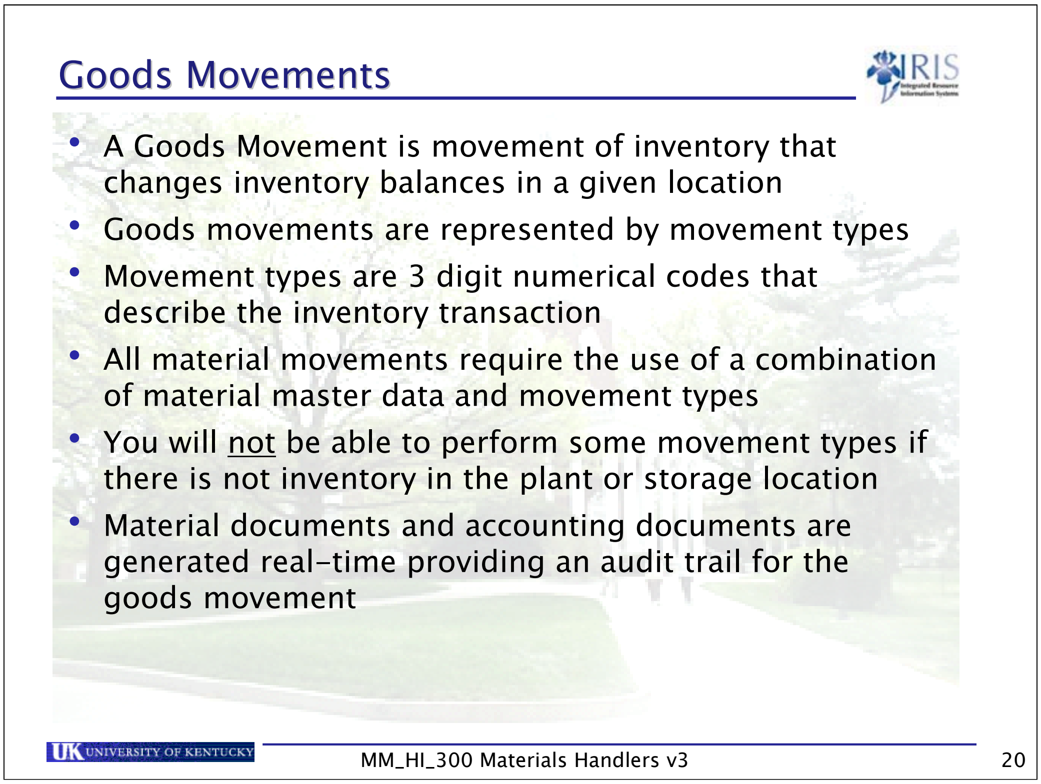
REFILL – RECVREFL = MIGO – A09 Remove from Storage 313 Conduct daily replenishment request from other storage location and

Request for supplies to be moved between storage locations

REFILL – RECVREFL = MIGO – A10 Place in Storage 315 Place received supplies into the location

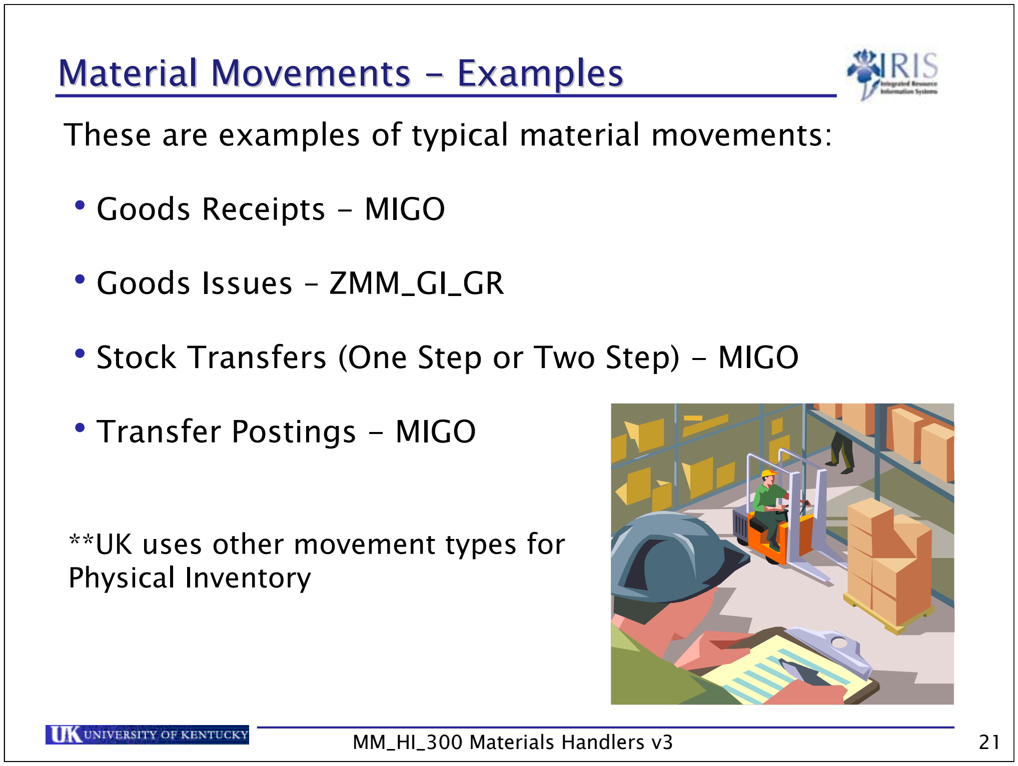
REFILL – RECVREFL = MIGO- A08 Transfer Posting –Return stock from stock in transit status

Manual Request = MB21 – Create Receive request for materials, create reservation to other storage location for hospital departments including WBS (Grant) accounts. Manual request for bulk supply materials



Goods Movements

- A Goods Movement is movement of inventory that changes inventory balances in a given location
- Goods movements are represented by movement types
- Movement types are 3 digit numerical codes that describe the inventory transaction
- All material movements require the use of a combination of material master data and movement types
- You will <u>not</u> be able to perform some movement types if there is not inventory in the plant or storage location
- Material documents and accounting documents are generated real-time providing an audit trail for the goods movement



Material Movements – Examples

These are examples of typical material movements:

- Goods Receipts – MIGO
- Goods Issues – ZMM_GI_GR
- Stock Transfers (One Step or Two Step) – MIGO
- Transfer Postings – MIGO

**UK uses other movement types for Physical Inventory

Material movements include both external movements (such as goods receipts from external procurement) and internal movements (such as goods issues for consumption, transfer postings). In general, a transaction that causes a stock change is marked as a goods movement. SAP uses movement types to document the movement of materials within an enterprise. There are literally thousands of movement types in the SAP system.

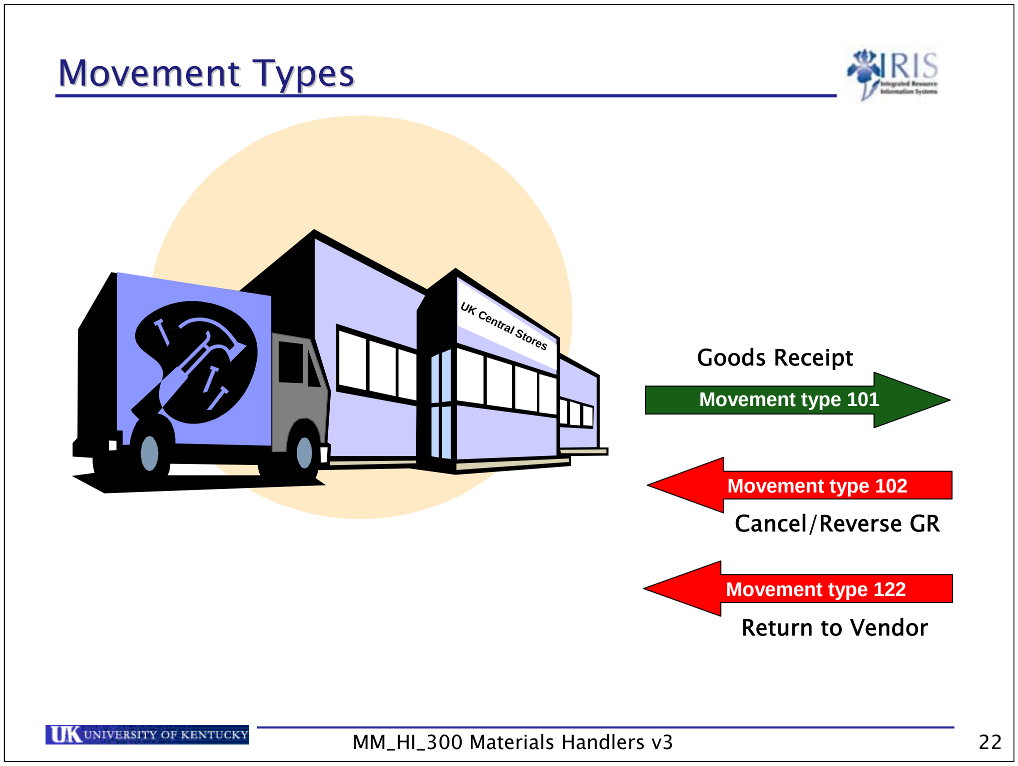
Goods Receipt: A goods receipt (GR) is a goods movement with which the receipt of goods from a vendor is posted. A goods receipt for stocked items leads to an increase in stock levels.

Note: Non-stock items are also received in central receiving area to a cost center (Department).

Goods Issue: A goods issue (GI) is a goods movement in which a material withdrawal is charged to a cost center or grant account and leads to a reduction in stock.

Stock Transfer: A stock transfer is the removal of material from one storage location and its transfer to another storage location.

Transfer Postings: A transfer posting is reversal of stock in transit.



Movement Types

Goods Receipt

Movement type 101

Movement type 102

Cancel/Reverse GR

Movement type 122

Return to Vendor

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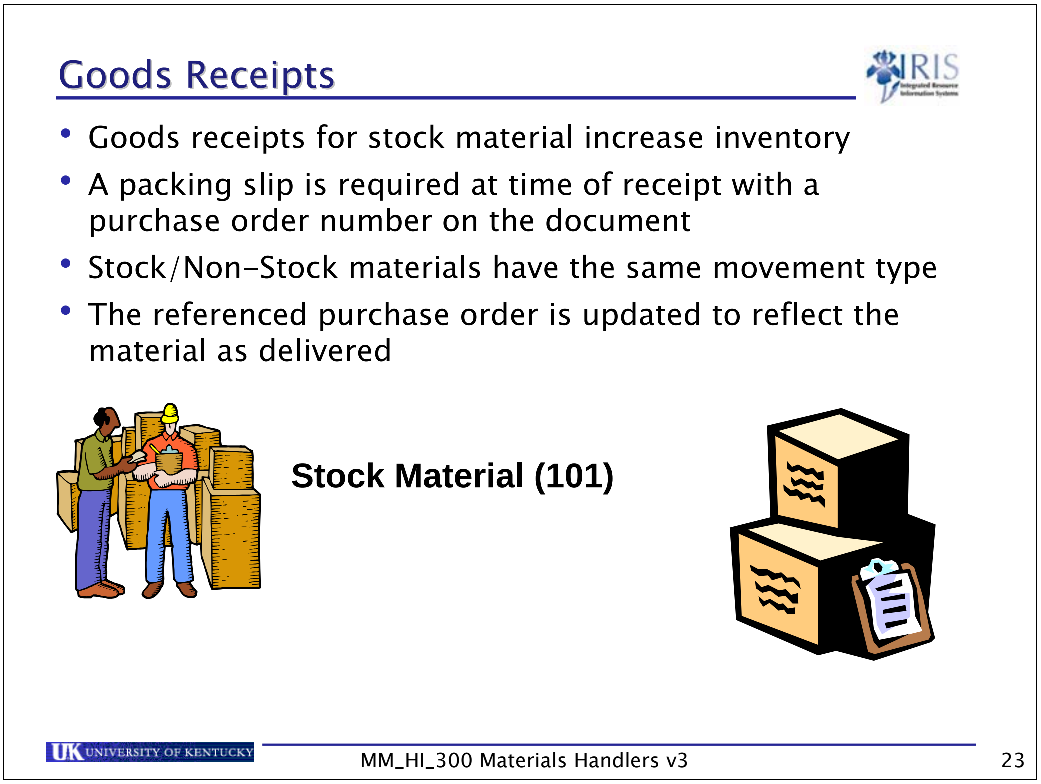
The movement type is a three-digit key used to designate the type of goods movements, such as, goods receipts, goods issues or transfer postings.

The movement type also determines how the stock fields in the material master record are to be updated.

Most movement types have a corresponding “reversal” movement type. Material documents are created to document the movement. Accounting documents (when applicable) are also created when the transaction is saved.



Goods Receipts

- Goods receipts for stock material increase inventory
- A packing slip is required at time of receipt with a purchase order number on the document
- Stock/Non-Stock materials have the same movement type
- The referenced purchase order is updated to reflect the material as delivered

Stock Material (101)

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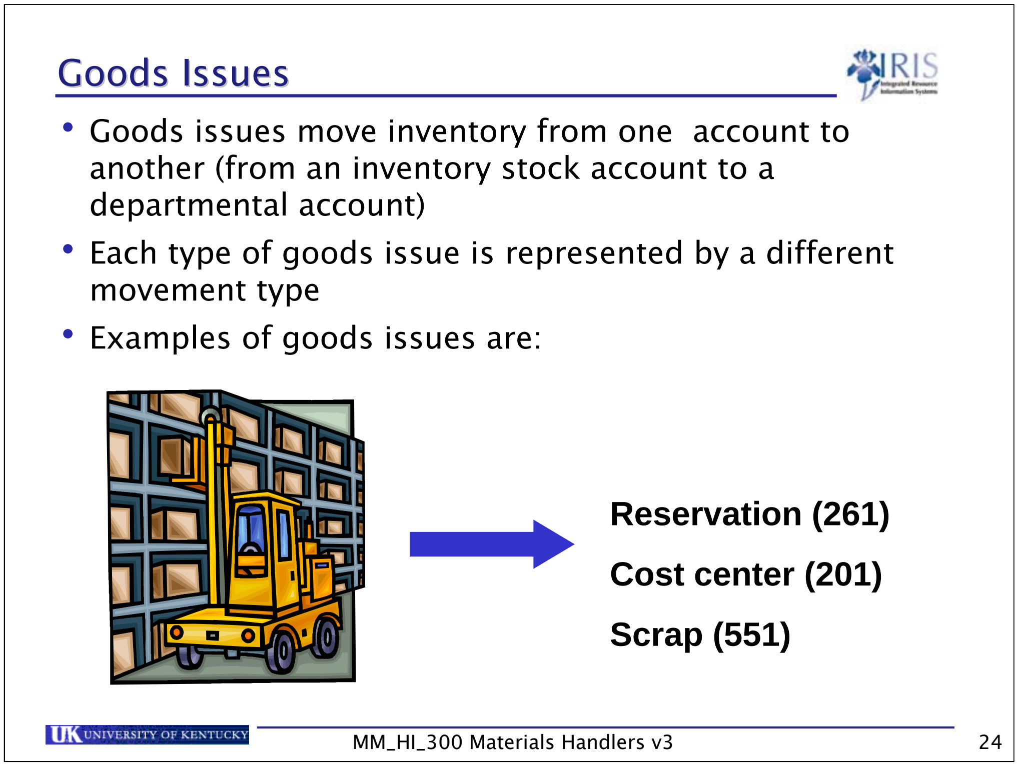


Goods Issues

- Goods issues move inventory from one account to another (from an inventory stock account to a departmental account)
- Each type of goods issue is represented by a different movement type
- Examples of goods issues are:

Reservation (261)

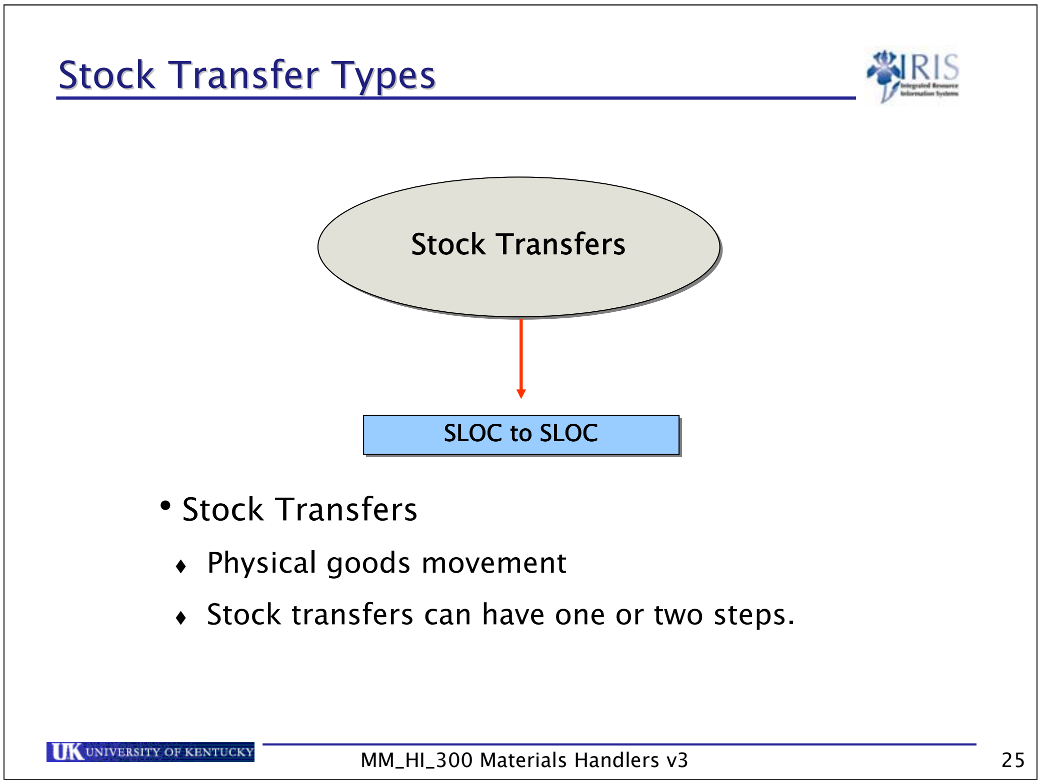
Cost center (201)

Scrap (551)

A goods issue (GI) is a goods movement that leads to a reduction in stock. The movement type determines what kind of goods issue takes place. For example a goods issue to a cost center would use a 201 movement type.

The movement type also determines what additional data is required. For example, a goods issue to a cost center requires the cost center number to which the material is being issued.

Issues for stocked materials are updated automatically in the material master record. On the storage location tab in the material master the un-restricted use stock level is reduced.



Stock Transfer Types

Stock Transfers

SLOC to SLOC

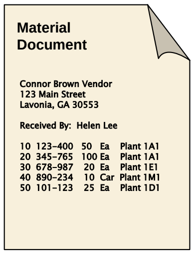
- Stock Transfers
  - Physical goods movement
  - Stock transfers can have one or two steps.

Unlike stock transfers, transfer postings do not usually involve a physical goods movement, but a change in stock location.

Types of transfer postings are: change from one storage location to another.

Material / Accounting Documents

- Material documents provide an on-line audit trail of the goods movement type executed
- Each movement type and reversal movement type will generate a material document
- An accounting document will provide an on-line audit trail of the associated dollars with the movement type
- Not all transactions generate an accounting document: for example when a material is moved between storage locations

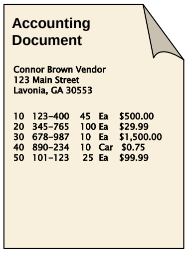


Material Document

Connor Brown Vendor
123 Main Street
Lavonia, GA 30553

Received By: Helen Lee

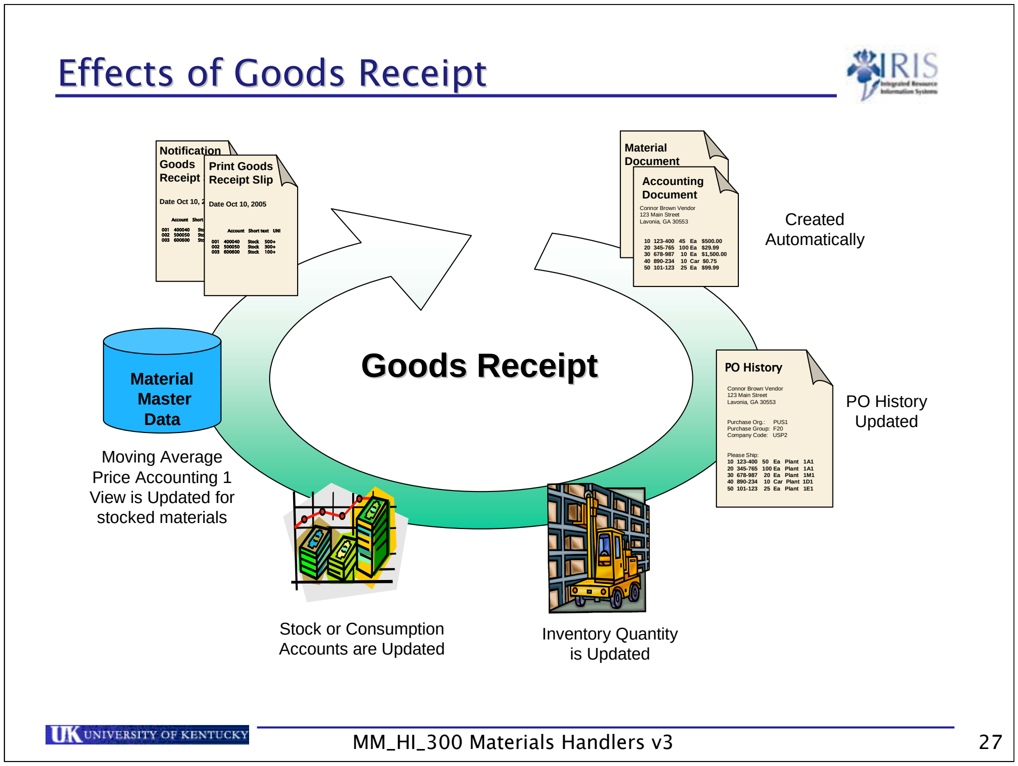
10	123-400	50	Ea	Plant 1A1
20	345-765	100	Ea	Plant 1A1
30	678-987	20	Ea	Plant 1E1
40	890-234	10	Car	Plant 1M1
50	101-123	25	Ea	Plant 1D1



Accounting Document

Connor Brown Vendor
123 Main Street
Lavonia, GA 30553

10	123-400	45	Ea	$500.00
20	345-765	100	Ea	$29.99
30	678-987	10	Ea	$1,500.00
40	890-234	10	Car	$0.75
50	101-123	25	Ea	$99.99



Effects of Goods Receipt

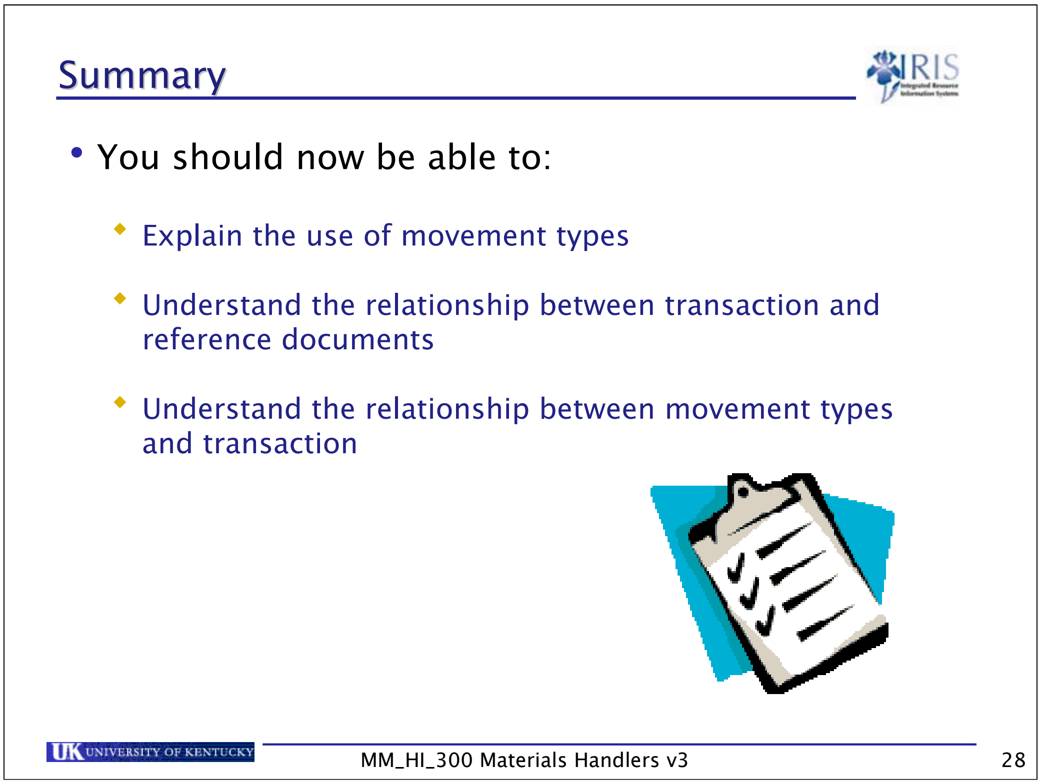
Documents: Material and accounting documents created automatically.

Purchase Order History: Documents good receipt quantity and value, reduces open order quantity and sets the delivery complete indicator

Inventory: Quantity in storage location is updated if the material is inventory managed and not assigned to an account assignment object cost center.

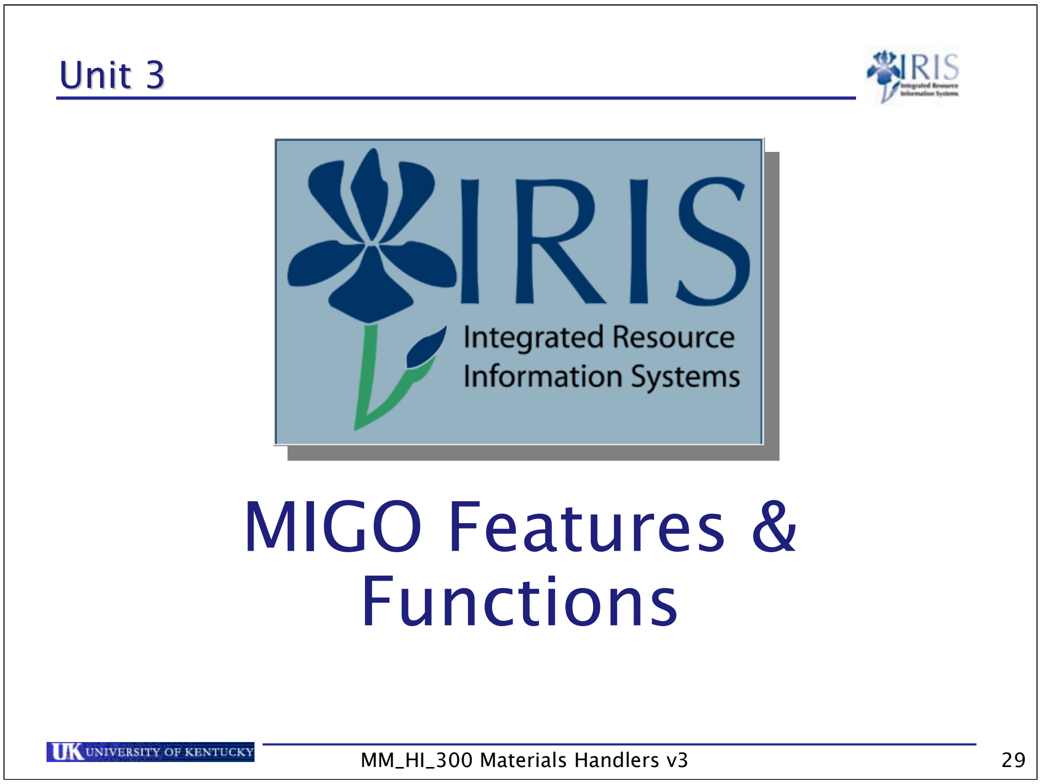
Moving Average price: MAP is updated in the material master (Accounting 1 view).

Optional: The goods receipt slip can be printed when the goods receipt is posted.



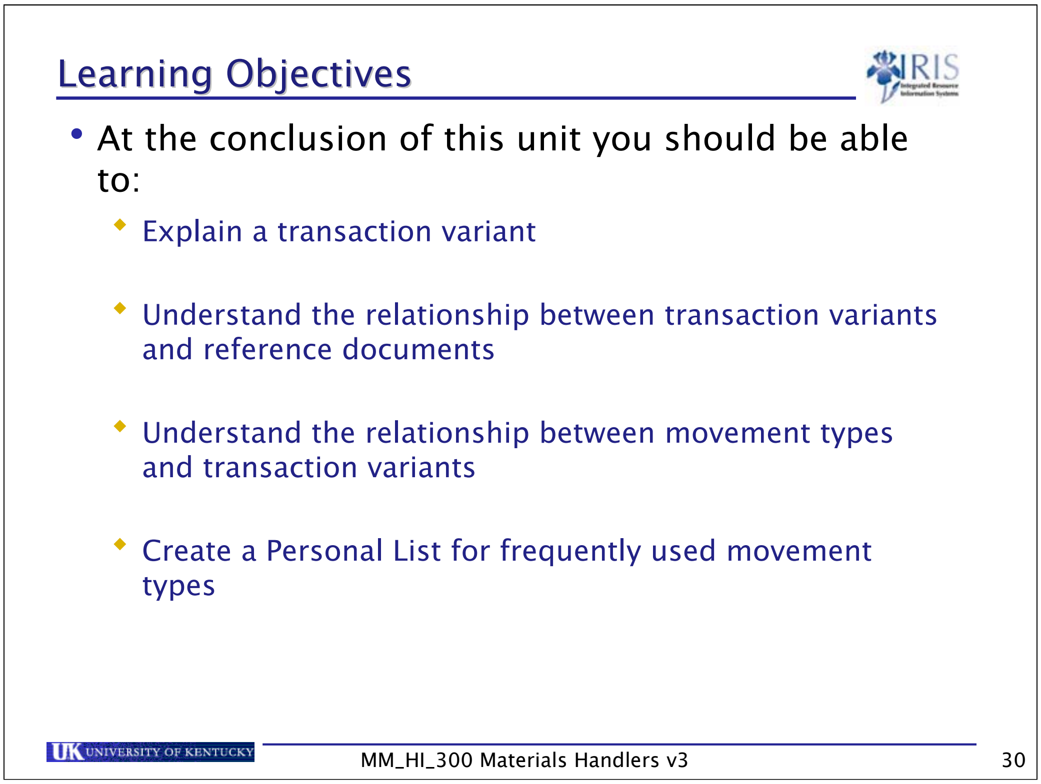
Summary

- You should now be able to:
  - Explain the use of movement types
  - Understand the relationship between transaction and reference documents
  - Understand the relationship between movement types and transaction



Unit 3

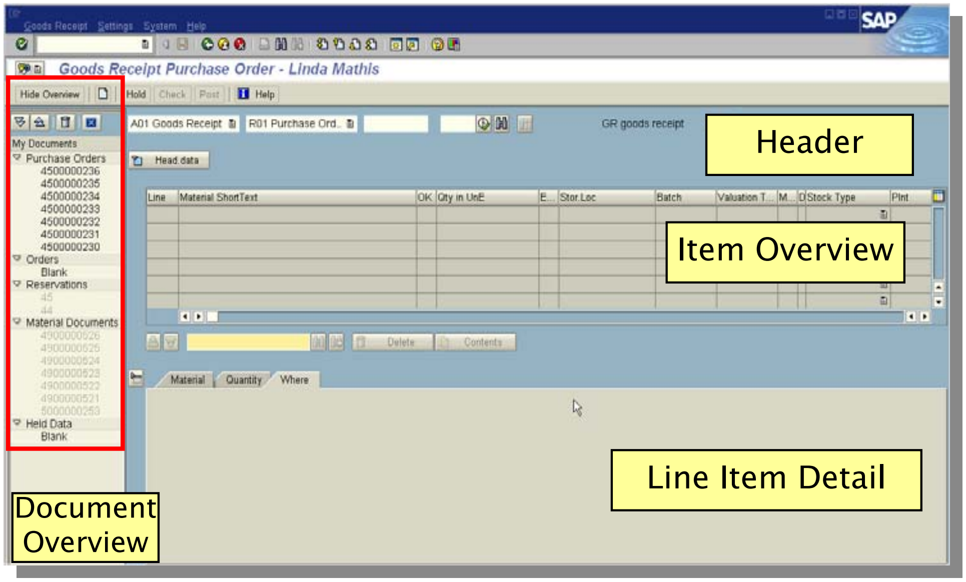
MIGO Features & Functions



Learning Objectives

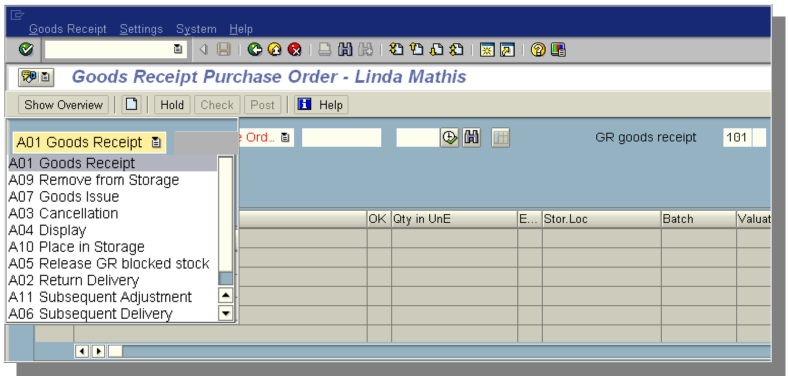
- At the conclusion of this unit you should be able to:
  - Explain a transaction variant
  - Understand the relationship between transaction variants and reference documents
  - Understand the relationship between movement types and transaction variants
  - Create a Personal List for frequently used movement types

MIGO Structure



Transaction Variants

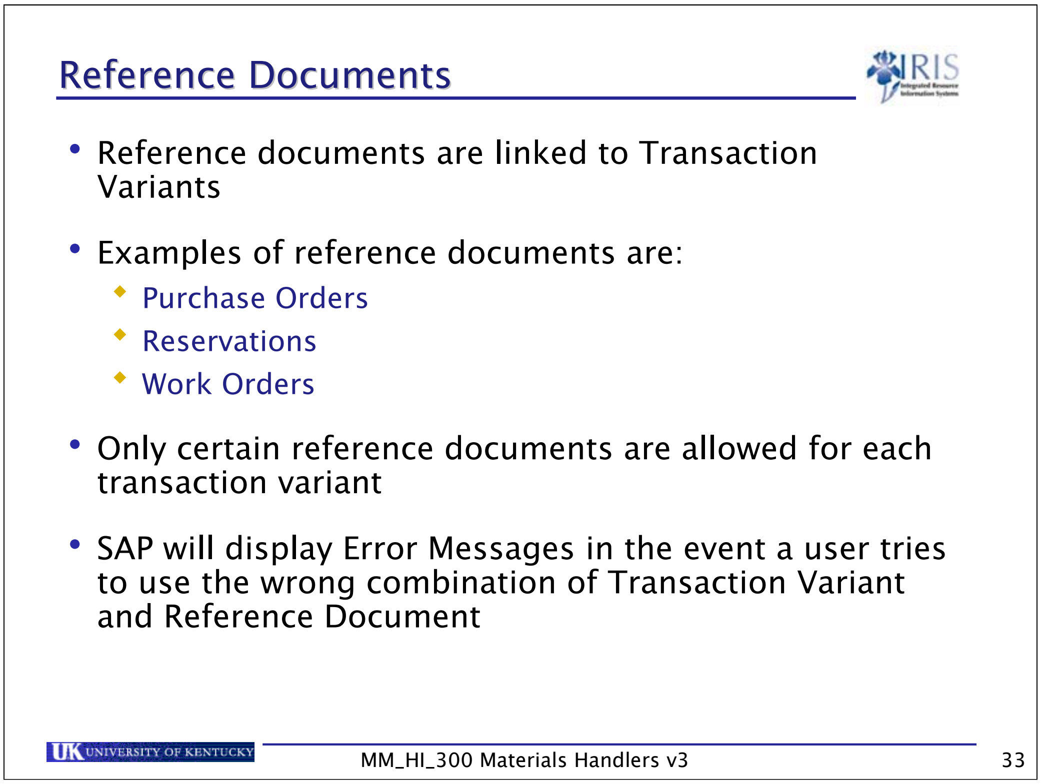
- Transaction variants describe the type of goods movement and must correspond to the appropriate goods movement
- SAP defaults the last transaction variant executed by the user and ***may need to be changed*** for the current goods movement
- All MIGO transaction variants can be accessed using the transaction code: MIGO-Goods Movement



The transaction variant determines what type of goods movement will be executed. The transaction variant controls the following functionality:

- The reference document
- The movement type

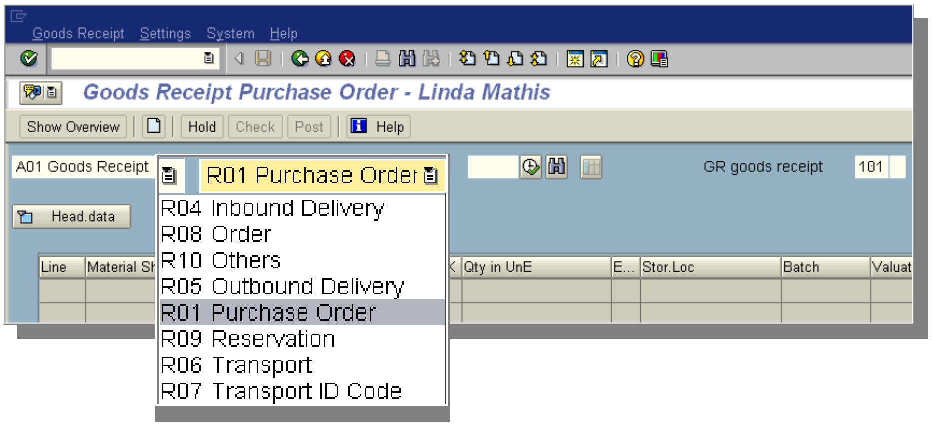
Note: Whenever the transaction is called, the system automatically defaults the last transaction variant executed by the user. The user may or may need to change the variant.



Reference Documents

- Reference documents are linked to Transaction Variants
- Examples of reference documents are:
  - Purchase Orders
  - Reservations
  - Work Orders
- Only certain reference documents are allowed for each transaction variant
- SAP will display Error Messages in the event a user tries to use the wrong combination of Transaction Variant and Reference Document

Goods Receipt Reference Documents



Goods Receipt Purchase Order - Linda Mathis

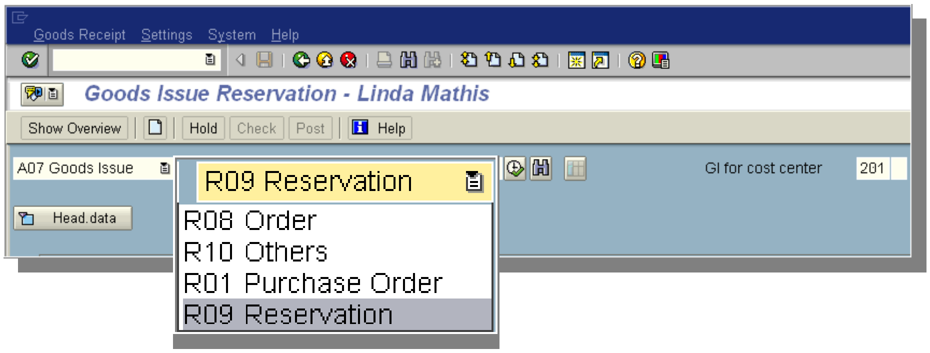
A01 Goods Receipt

R01 Purchase Order

GR goods receipt 101

The goods receipt transaction variant controls what documents can be referenced (used) for the goods receipt

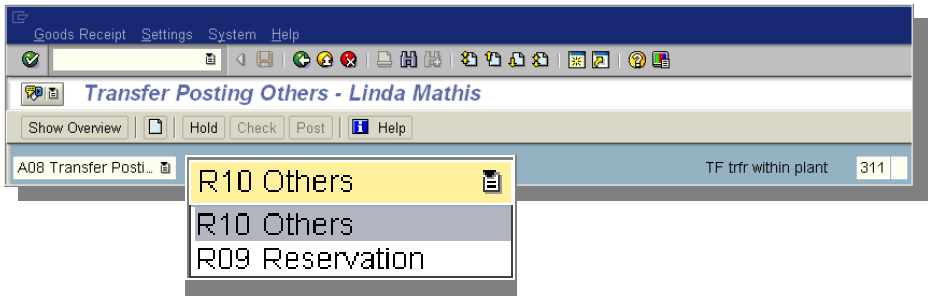
Goods Issue Reference Documents



The reference documents for a goods issue are different then those for a goods receipt

Based on the reference document selected, SAP will prompt the user for the appropriate document number

Transfer Posting Reference Documents



Transfer Posting Others - Linda Mathis

A08 Transfer Posti...

R10 Others

R10 Others
R09 Reservation

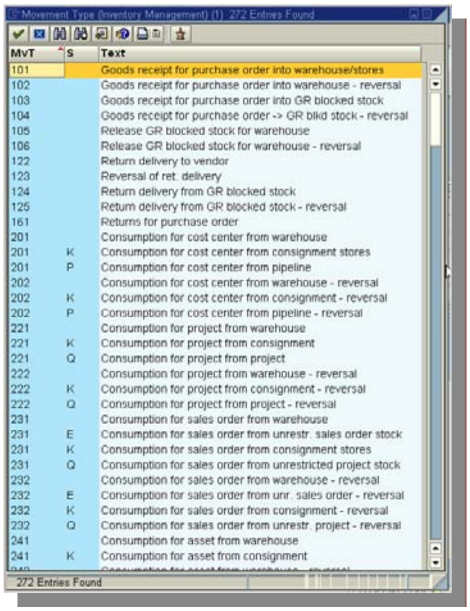
TF trfr within plant 311

The combination of transaction variant and reference document also determines the appropriate movement types for the transaction

Movement Types

Movement Types:

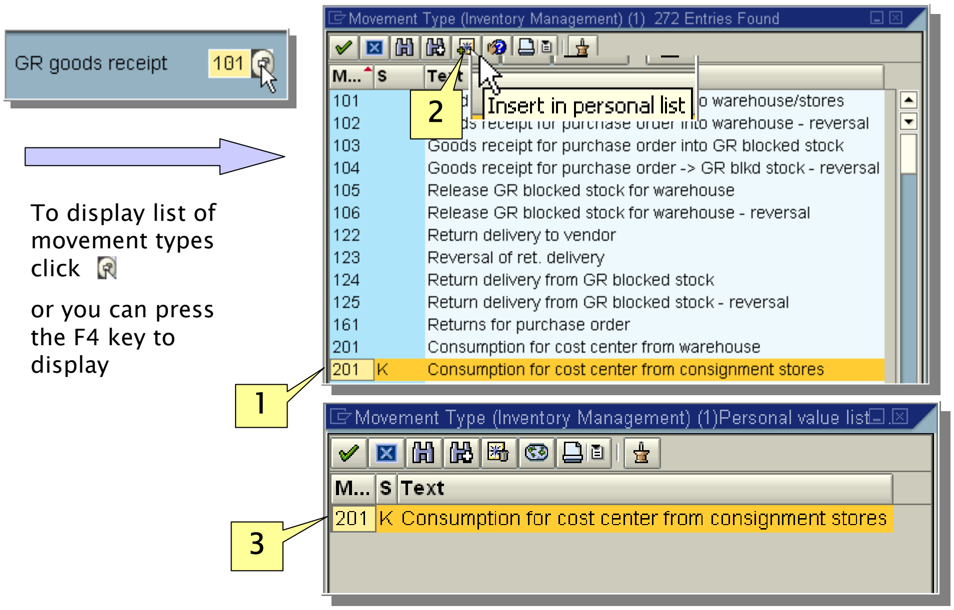
- Represent the type of goods movement
- Control how the goods can be moved
- Determine how the screen looks and what information must be entered
- Movement types must be used **anytime** material is received, issued or transferred



MvT	S	Text
101		Goods receipt for purchase order into warehouse/stores
102		Goods receipt for purchase order into warehouse - reversal
103		Goods receipt for purchase order into GR blocked stock
104		Goods receipt for purchase order -> GR blkd stock - reversal
105		Release GR blocked stock for warehouse
106		Release GR blocked stock for warehouse - reversal
122		Return delivery to vendor
123		Reversal of ret. delivery
124		Return delivery from GR blocked stock
125		Return delivery from GR blocked stock - reversal
161		Returns for purchase order
201		Consumption for cost center from warehouse
201	K	Consumption for cost center from consignment stores
201	P	Consumption for cost center from pipeline
202		Consumption for cost center from warehouse - reversal
202	K	Consumption for cost center from consignment - reversal
202	P	Consumption for cost center from pipeline - reversal
221		Consumption for project from warehouse
221	K	Consumption for project from consignment
221	Q	Consumption for project from project
222		Consumption for project from warehouse - reversal
222	K	Consumption for project from consignment - reversal
222	Q	Consumption for project from project - reversal
231		Consumption for sales order from warehouse
231	E	Consumption for sales order from unrestr. sales order stock
231	K	Consumption for sales order from consignment stores
231	Q	Consumption for sales order from unrestricted project stock
232		Consumption for sales order from warehouse - reversal
232	E	Consumption for sales order from unr. sales order - reversal
232	K	Consumption for sales order from consignment - reversal
232	Q	Consumption for sales order from unrestr. project - reversal
241		Consumption for asset from warehouse
241	K	Consumption for asset from consignment

272 Entries Found

Personal List Favorites



To display list of movement types click

or you can press the F4 key to display

Movement Type (Inventory Management) (1) 272 Entries Found

M...	S	Text
101		o warehouse/stores
102		ds receipt for purchase order into warehouse - reversal
103		Goods receipt for purchase order into GR blocked stock
104		Goods receipt for purchase order -> GR blkd stock - reversal
105		Release GR blocked stock for warehouse
106		Release GR blocked stock for warehouse - reversal
122		Return delivery to vendor
123		Reversal of ret. delivery
124		Return delivery from GR blocked stock
125		Return delivery from GR blocked stock - reversal
161		Returns for purchase order
201		Consumption for cost center from warehouse
201	K	Consumption for cost center from consignment stores

Movement Type (Inventory Management) (1)Personal value list

M...	S	Text
201	K	Consumption for cost center from consignment stores

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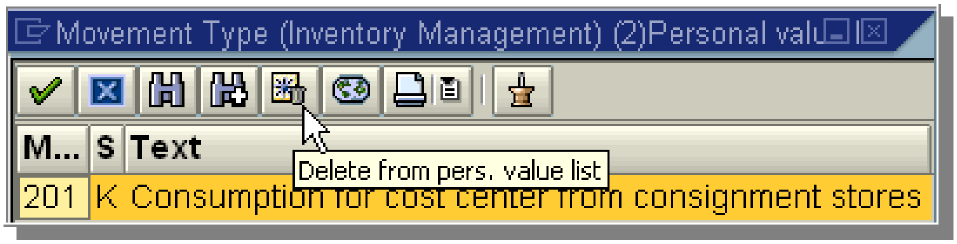
To create a Personal List:

1. Go to the Movement Type Field and press the F4 key
2. Select the Movement Type
3. Click on the Insert in personal list icon

- SAP copies the selected movement type into your Personal List and exits to screen
- The next time the function is used the Personal List will default automatically. The benefit of the Personal List is that the user only sees their most commonly used movement types.

Delete Line Items From Personal List



M...	S	Text
201	K	Consumption for cost center from consignment stores

To delete a line item from your Personal list:

1. Select the line item
2. Click on the *Delete from pers. value* list icon

To delete a line item form your Personal List:

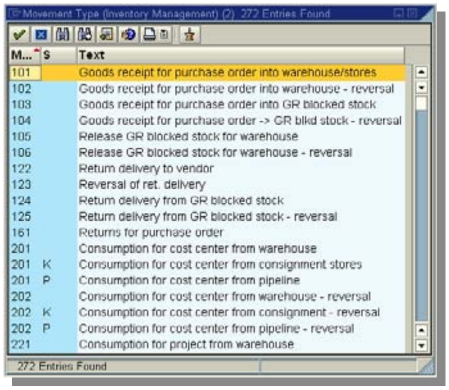
- Select the line item
- Click on the Delete from pers. value list icon

Display All Values

M...	S	Text
201	K	Consumption for cost center from consignment stores

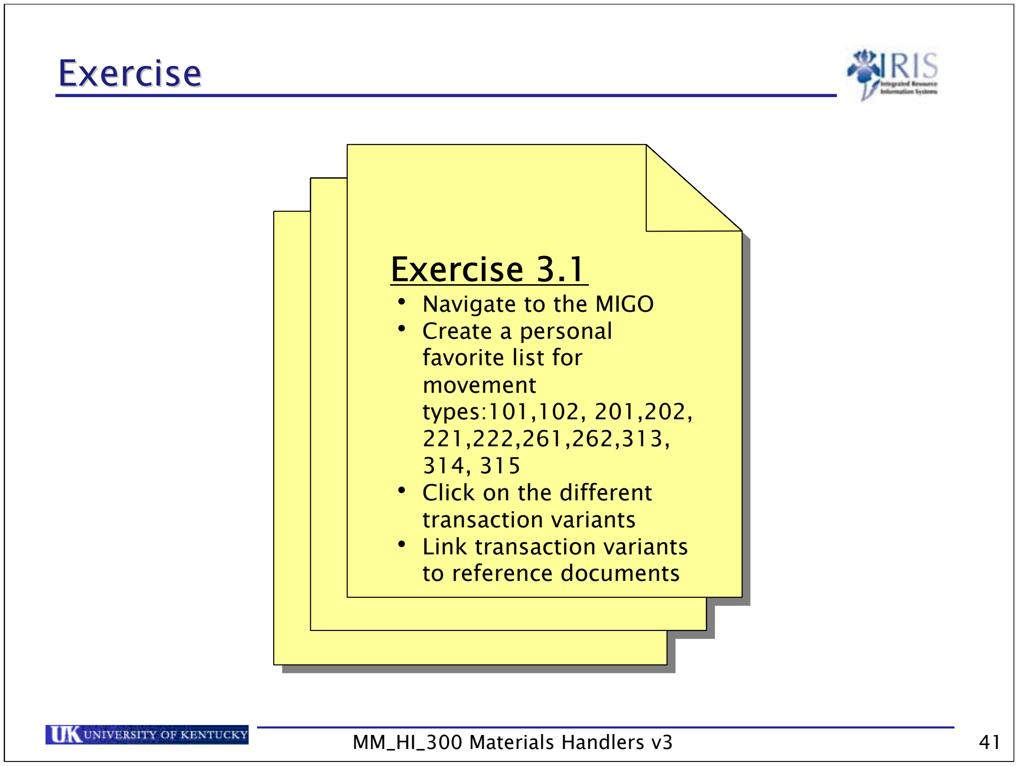
To display all movement types:

1. Click on the *Display All Values* icon
2. SAP will display all movement types
3. Scroll down to display all movement types



M...	S	Text
101		Goods receipt for purchase order into warehouse/stores
102		Goods receipt for purchase order into warehouse - reversal
103		Goods receipt for purchase order into GR blocked stock
104		Goods receipt for purchase order -> GR blkd stock - reversal
105		Release GR blocked stock for warehouse
106		Release GR blocked stock for warehouse - reversal
122		Return delivery to vendor
123		Reversal of ret. delivery
124		Return delivery from GR blocked stock
125		Return delivery from GR blocked stock - reversal
161		Returns for purchase order
201		Consumption for cost center from warehouse
201	K	Consumption for cost center from consignment stores
201	P	Consumption for cost center from pipeline
202		Consumption for cost center from warehouse - reversal
202	K	Consumption for cost center from consignment - reversal
202	P	Consumption for cost center from pipeline - reversal
221		Consumption for project from warehouse

272 Entries Found

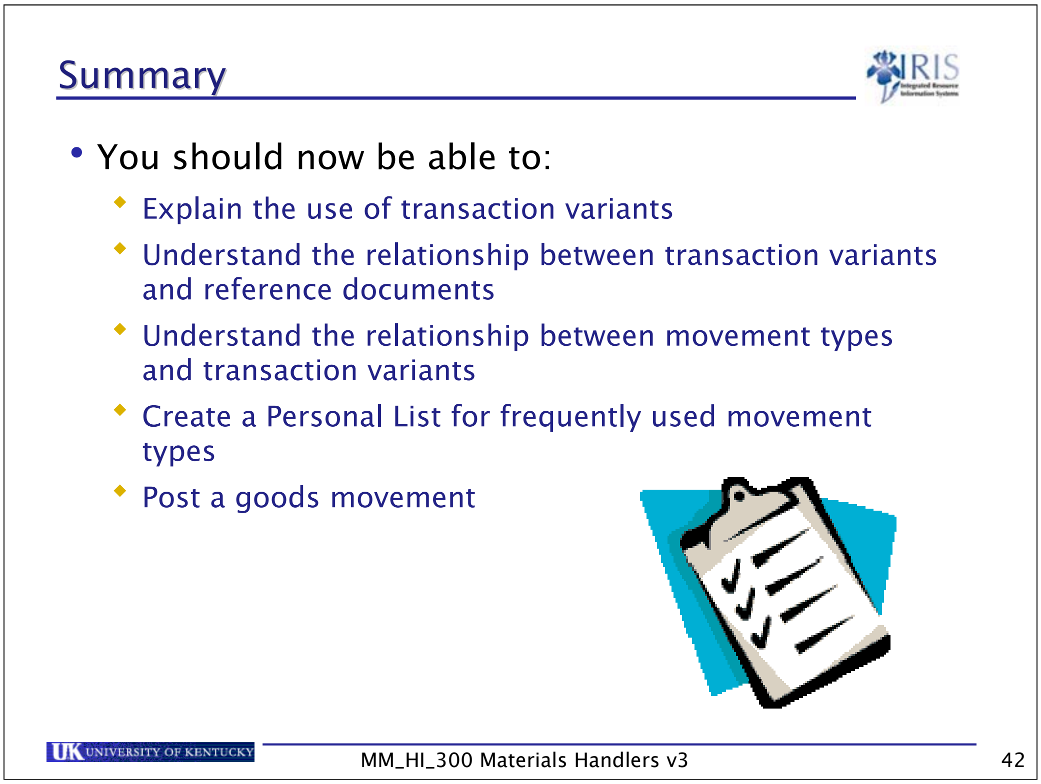


Exercise

Exercise 3.1

- Navigate to the MIGO
- Create a personal favorite list for movement types:101,102, 201,202, 221,222,261,262,313, 314, 315
- Click on the different transaction variants
- Link transaction variants to reference documents

Read Slide

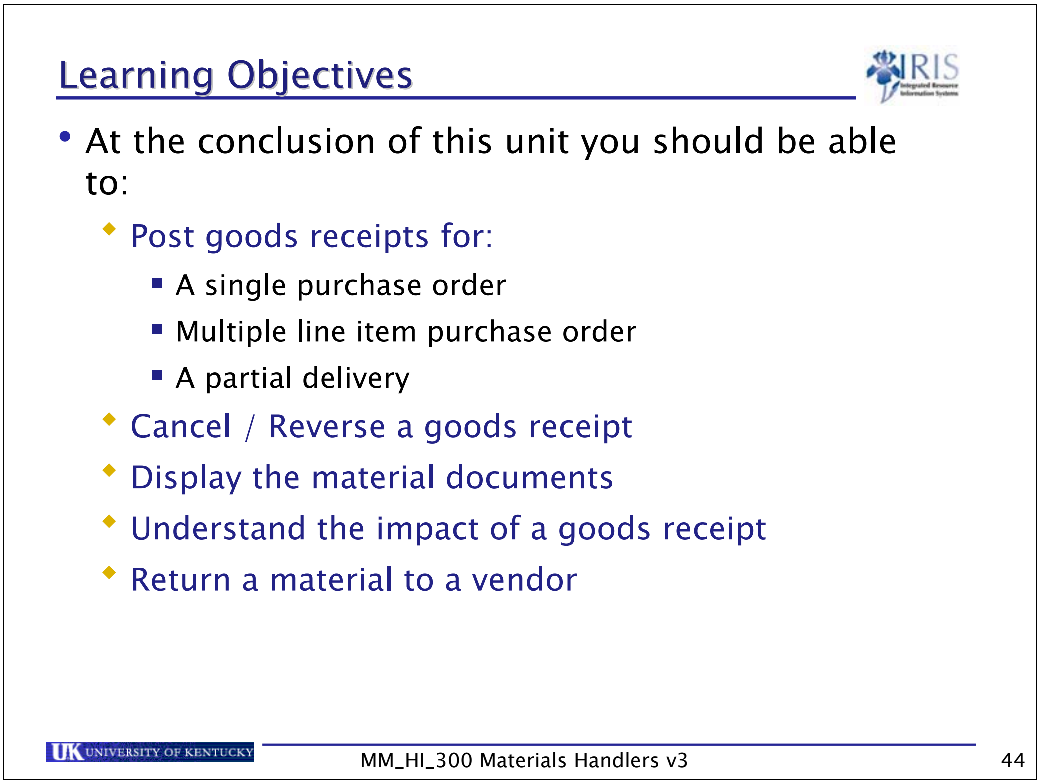


Summary

- You should now be able to:
  - Explain the use of transaction variants
  - Understand the relationship between transaction variants and reference documents
  - Understand the relationship between movement types and transaction variants
  - Create a Personal List for frequently used movement types
  - Post a goods movement

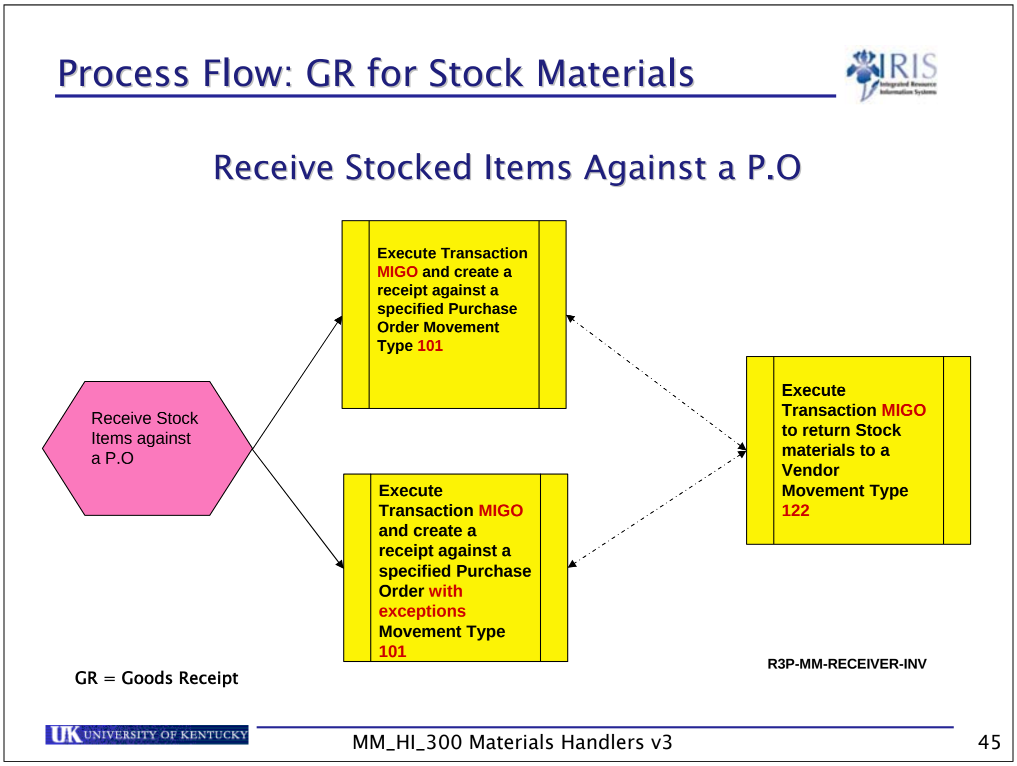
Unit 4

Goods Receipts



Learning Objectives

- At the conclusion of this unit you should be able to:
  - Post goods receipts for:
    - A single purchase order
    - Multiple line item purchase order
    - A partial delivery
  - Cancel / Reverse a goods receipt
  - Display the material documents
  - Understand the impact of a goods receipt
  - Return a material to a vendor



Process Flow: GR for Stock Materials

Receive Stocked Items Against a P.O

Receive Stock Items against a P.O

Execute Transaction MIGO and create a receipt against a specified Purchase Order Movement Type 101

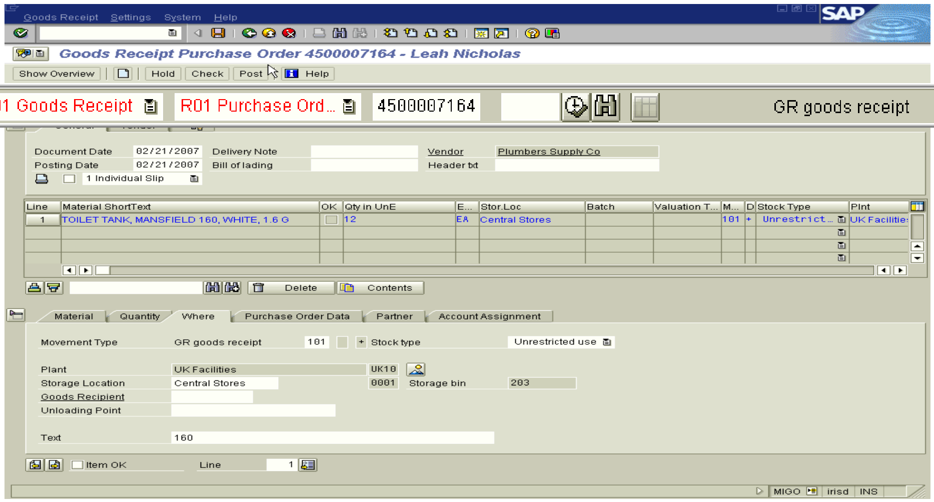
Execute Transaction MIGO and create a receipt against a specified Purchase Order with exceptions Movement Type 101

Execute Transaction MIGO to return Stock materials to a Vendor Movement Type 122

R3P-MM-RECEIVER-INV

GR = Goods Receipt

Goods Receipt for Purchase Order



Goods Receipt Purchase Order 4500007164 - Leah Nicholas

A01 Goods Receipt | R01 Purchase Ord... | 4500007164 | GR goods receipt 101

Document Date 02/21/2007
Posting Date 02/21/2007
1 Individual Slip
Delivery Note
Bill of lading
Vendor Plumbers Supply Co
Header txt

Line	Material ShortText	OK	Qty in UnE	E...	Stor.Loc	Batch	Valuation T...	M...	D	Stock Type	Plnt
1	TOILET TANK, MANSFIELD 160, WHITE, 1.6 G	☐	12	EA	Central Stores			101	+	Unrestrict...	UK Facilitie:

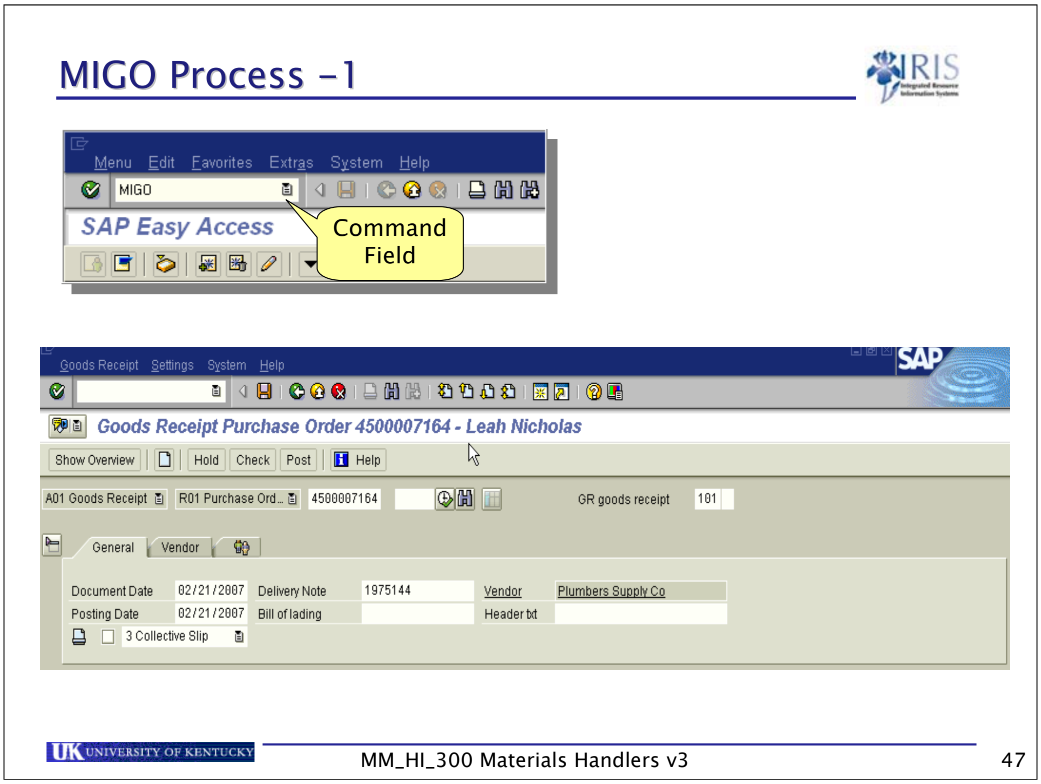
Movement Type GR goods receipt 101 + Stock type Unrestricted use
Plant UK Facilities UK10
Storage Location Central Stores 0001 Storage bin 203
Goods Recipient
Unloading Point
Text 160
☐ Item OK Line 1

Transaction Variant = Goods Receipt

Referencing Document = Purchase Order

Movement Type = 101

Goods receipts can reference purchase orders and are entered into the system via the transaction MIGO with a movement type 101. The advantage of entering a goods receipt with reference is that the details from the referencing documents are copied into the goods receipt thus eliminating the need to enter the information manually. This saves time and reduces errors due to “typos”.



MIGO Process -1

Goods Receipt Purchase Order 4500007164 - Leah Nicholas

A01 Goods Receipt | R01 Purchase Ord... | 4500007164 | GR goods receipt 101

Document Date 02/21/2007 | Delivery Note 1975144 | Vendor Plumbers Supply Co

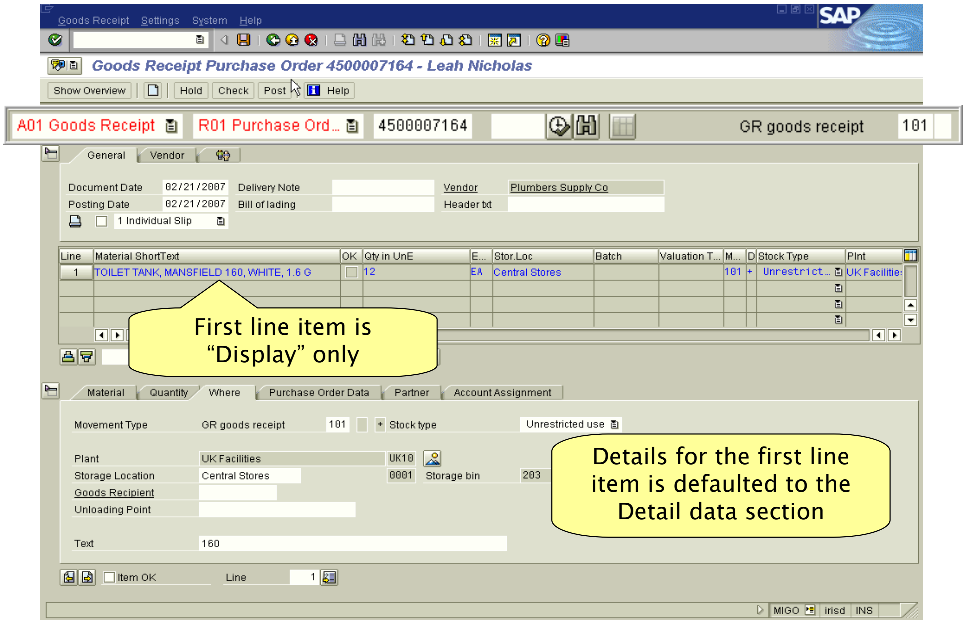
Posting Date 02/21/2007 | Bill of lading | Header txt

☐ 3 Collective Slip

MM_HI_300 Materials Handlers v3 47

1. From the SAP Easy Access screen type MIGO in the Command Field and press the Enter key (type /nMIGO if already on another screen)
   a. Verify the transaction is (A01) Goods Receipt. Change if necessary using the F4 function key.
   b. Verify the Reference document is (R01) Purchase Order. Change if necessary using the F4 function key
   c. Enter the purchase order number for which the goods are being received against. **Note:** If the PO number is not known, click on the Possible Entries icon to search for the desired purchase order number – Most common tabs to use are "Purchasing Documents per Vendor", "Purchase Orders per PO Date", and "Purchasing Documents per Cost Center"
   d. Verify that the goods movement number is 101 (system default)
   e. Enter the Bill of lading number from the packing slip
   f. Posting Date – The posting date is the date the entry is to be created on the accounting books. The posting date is significant since it is the date the accounting transaction is posted into. This data also impacts vendor performance tracking (i.e. how close to the scheduled delivery date did the receipt actually occur?), reporting, and vendor payments. SAP does not allow postings to "closed" accounting periods, and it does not allow postings to future dates. BE CAREFUL with posting dates! Make sure this date is accurate!
   g. Document Date – The document date is the date of entry into the system. The system automatically defaults to the current date.

MIGO Process – 2



Goods Receipt Purchase Order 4500007164 - Leah Nicholas

A01 Goods Receipt | R01 Purchase Ord... | 4500007164 | GR goods receipt 101

Document Date 02/21/2007
Posting Date 02/21/2007
Delivery Note
Bill of lading
Vendor Plumbers Supply Co
Header txt
☐ 1 Individual Slip

Line	Material ShortText	OK	Qty in UnE	E...	Stor.Loc	Batch	Valuation T...	M...	D	Stock Type	Plnt
1	TOILET TANK, MANSFIELD 160, WHITE, 1.6 G	☐	12	EA	Central Stores			101	+	Unrestrict...	UK Facilitie:

Movement Type GR goods receipt 101 + Stock type Unrestricted use
Plant UK Facilities UK10
Storage Location Central Stores 0001 Storage bin 203
Goods Recipient
Unloading Point
Text 160
☐ Item OK
Line 1

First line item is "Display" only

Details for the first line item is defaulted to the Detail data section

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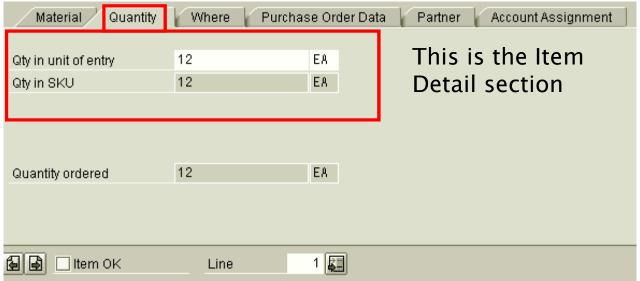
MM_HI_300 Materials Handlers v3 48

The details for the first line item default into the Item Detail section of the screen. This section contains a series of tabs and information specific to each tab. To access the information for a particular tab, use your mouse to click on it. The information in Item Detail is more accessible and easier to read than it is in the Item Overview.

MIGO Process – 3

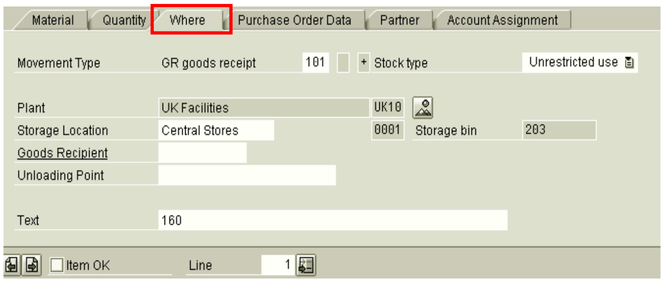


Qty in unit of entry 12 EA
Qty in SKU 12 EA
Quantity ordered 12 EA
☐ Item OK
Line 1

This is the Item Detail section

Quantity?

How much is being received (open order qty. defaults)



Movement Type GR goods receipt 101 + Stock type Unrestricted use
Plant UK Facilities UK10
Storage Location Central Stores 0001 Storage bin 203
Goods Recipient
Unloading Point
Text 160
☐ Item OK
Line 1

Where?

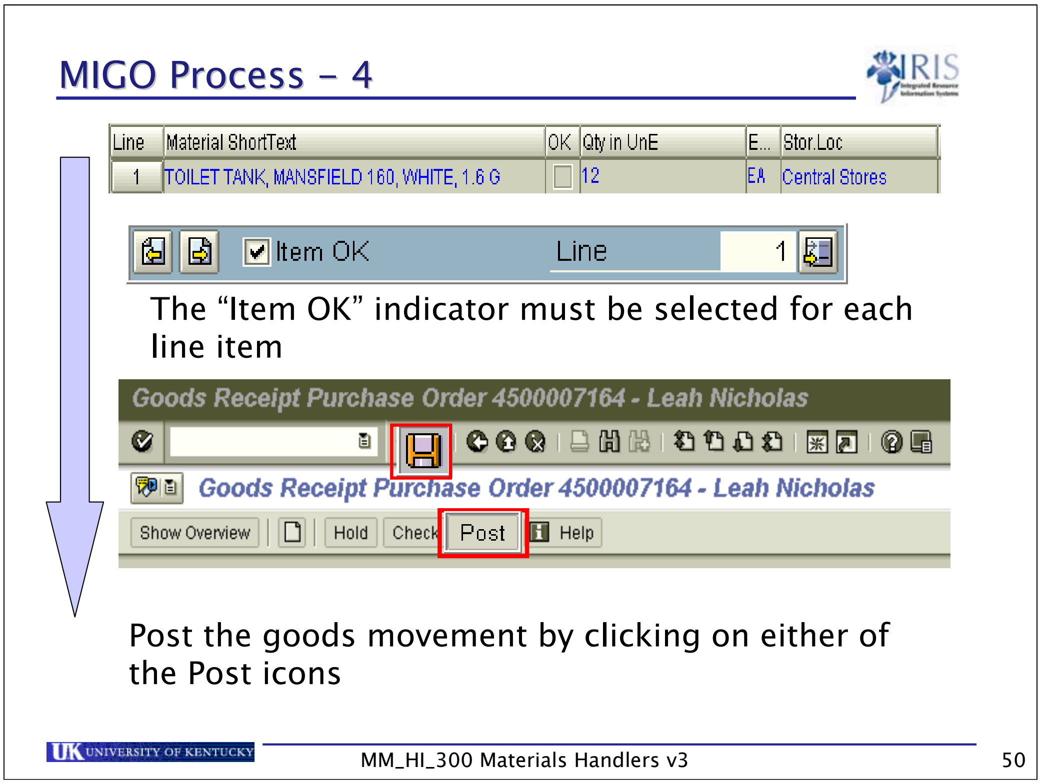
Plant (UK10) & Central Stores Location (0001)

Quantity?

Click on the Quantity tab and enter the actual quantity that is actually being received. This can be the entire open order quantity or a partial quantity. Over receipts are not allowed.

Where?

Click on the Where tab to verify the plant and storage location is entered. This information may be changed if necessary to another storage location. The plant cannot be changed in this transaction.



MIGO Process – 4

Line	Material ShortText	OK	Qty in UnE	E...	Stor.Loc
1	TOILET TANK, MANSFIELD 160, WHITE, 1.6 G	☐	12	EA	Central Stores

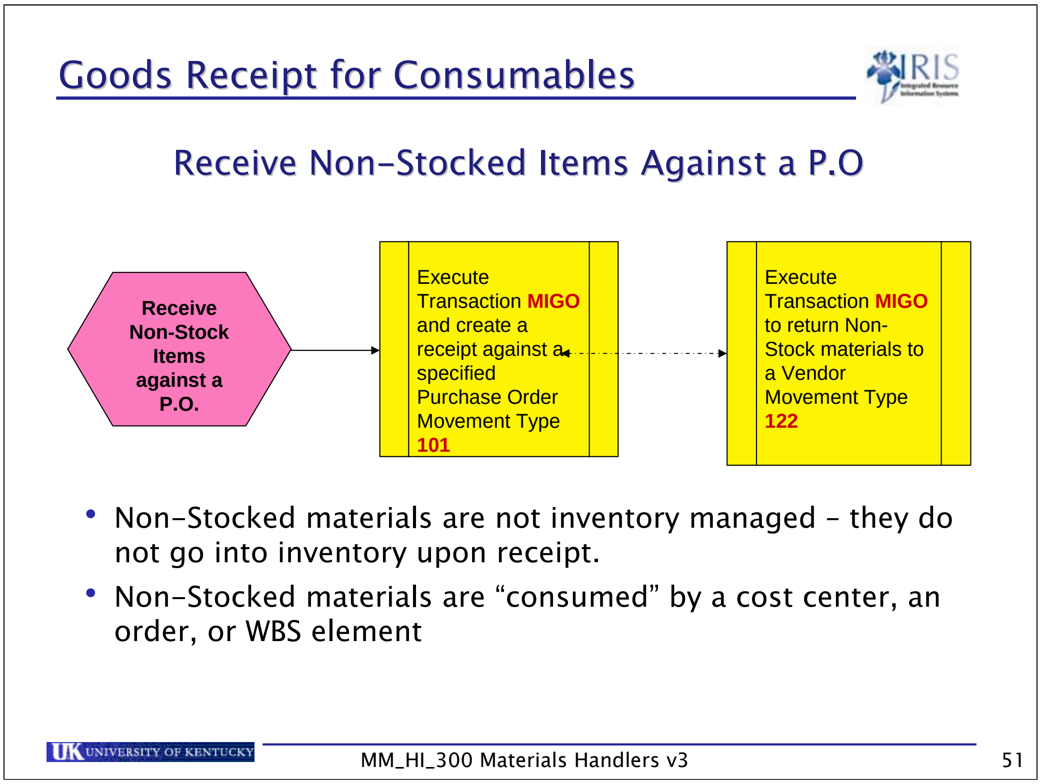
☑ Item OK

Line 1

The “Item OK” indicator must be selected for each line item

Goods Receipt Purchase Order 4500007164 - Leah Nicholas

Post the goods movement by clicking on either of the Post icons



Goods Receipt for Consumables

Receive Non-Stocked Items Against a P.O

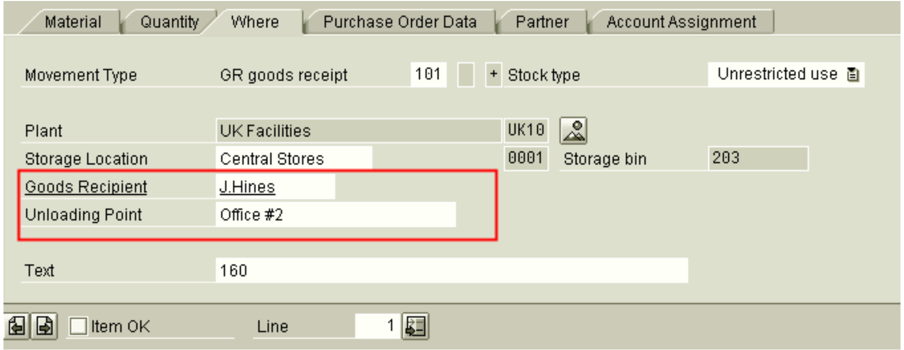
Receive Non-Stock Items against a P.O.

Execute Transaction **MIGO** and create a receipt against a specified Purchase Order Movement Type **101**

Execute Transaction **MIGO** to return Non-Stock materials to a Vendor Movement Type **122**

- Non-Stocked materials are not inventory managed – they do not go into inventory upon receipt.
- Non-Stocked materials are "consumed" by a cost center, an order, or WBS element

Goods Receipt for a Cost Center



Movement Type: GR goods receipt 101 +
Stock type: Unrestricted use

Plant: UK Facilities UK10
Storage Location: Central Stores 0001
Storage bin: 203
Goods Recipient: J.Hines
Unloading Point: Office #2

Text: 160

☐ Item OK
Line: 1

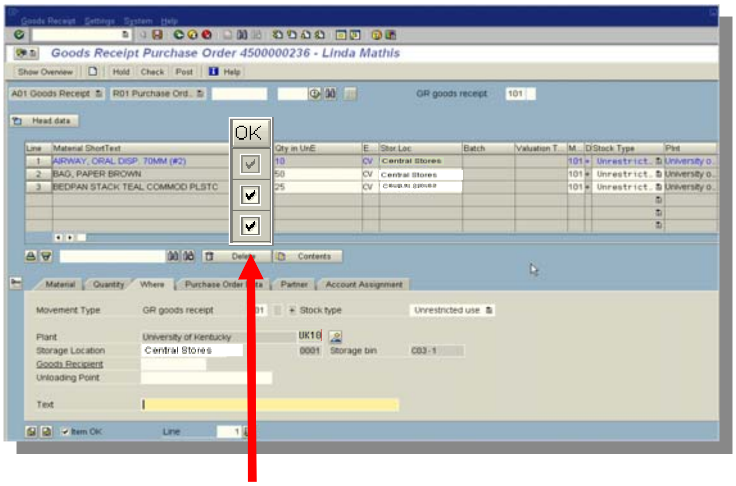
- The **Goods Recipient** and **Unloading Point** let the Material Handler know where to deliver the goods.

◆The difference between a goods receipt for a stock (inventory) material and a consumable (expensed) material is that the consumable does not go into inventory and cannot be displayed in the stock overview.

◆A goods receipt for a non-stock purchase order is executed using a 101 movement type and references a purchase order.

◆To make sure the material gets to the correct location (unloading point) and recipient, the information is displayed on the goods receipt.

Goods Receipt for Multiple Line Item PO



Goods Receipt Purchase Order 4500000236 - Linda Mathis

GR goods receipt 101

Line	Material ShortText	OK	Qty in UnE	E..	Stor Loc	Batch	Valuation T..	M..	D	Stock Type	Plnt
1	AIRWAY, ORAL DISP. 70MM (#2)	☑	10	CV	Central Stores			101		Unrestrict..	University o..
2	BAG, PAPER BROWN	☑	50	CV	Central Stores			101		Unrestrict..	University o..
3	BEDPAN STACK TEAL COMMOD PLSTC	☑	25	CV	[illegible]			101		Unrestrict..	University o..

Movement Type GR goods receipt 01 Stock type Unrestricted use

Plant University of Kentucky UK18

Storage Location Central Stores 0001 Storage bin C03-1

Goods Recipient

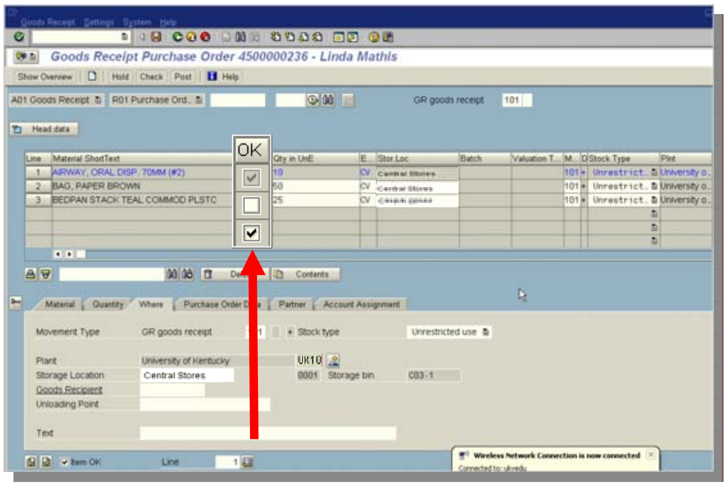
Unloading Point

Text

☑ Item OK Line 1

The “Item OK” indicator ***MUST*** be selected for all line items that are part of the goods receipt

GR for Multiple Line Item PO cont'd



Goods Receipt Purchase Order 4500000236 - Linda Mathis

A01 Goods Receipt | R01 Purchase Ord.. | GR goods receipt 101

Line	Material ShortText	OK	Qty in UnE	E..	Stor.Loc	Batch	Valuation T..	M..	D	Stock Type	Plnt
1	AIRWAY, ORAL DISP. 70MM (#2)	☑	10	CV	Central Stores			101		Unrestrict..	University o..
2	BAG, PAPER BROWN	☐	50	CV	Central Stores			101		Unrestrict..	University o..
3	BEDPAN STACK TEAL COMMOD PLSTC	☑	25	CV	[illegible]			101		Unrestrict..	University o..

Movement Type: GR goods receipt 101 | Stock type: Unrestricted use

Plant: University of Kentucky UK10

Storage Location: Central Stores 0001 | Storage bin: C03-1

Goods Recipient:

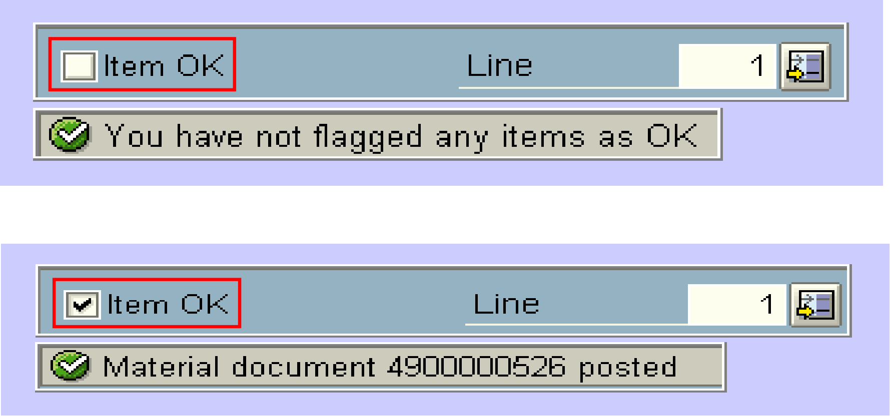
Unloading Point:

Text:

☑ Item OK | Line 1

- In the screen shot above ***ONLY*** line items 1 and 3 will be posted (Item OK indicator selected)
- Line item 2 ***WILL NOT*** be posted (Item OK NOT selected)

Item "OK"



☐ Item OK

Line 1

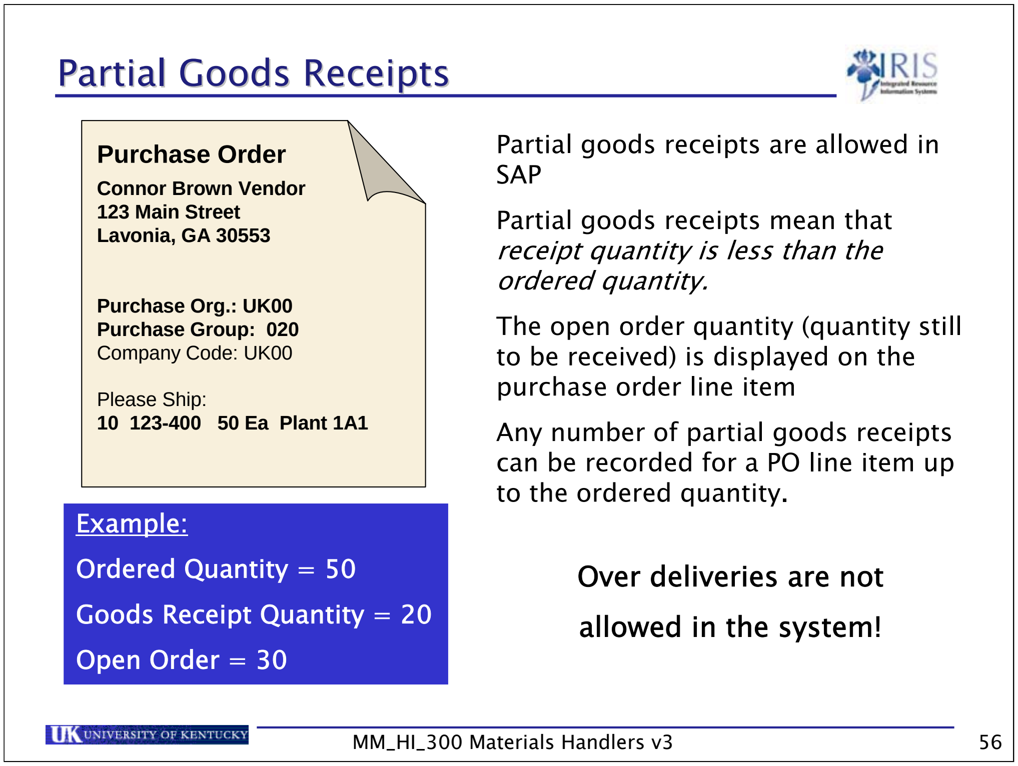
You have not flagged any items as OK

☑ Item OK

Line 1

Material document 4900000526 posted

All items <u>must</u> be checked "OK" to be posted in SAP



Partial Goods Receipts

Purchase Order

Connor Brown Vendor
123 Main Street
Lavonia, GA 30553

Purchase Org.: UK00
Purchase Group: 020
Company Code: UK00

Please Ship:
10 123-400 50 Ea Plant 1A1

Example:

Ordered Quantity = 50

Goods Receipt Quantity = 20

Open Order = 30

Partial goods receipts are allowed in SAP

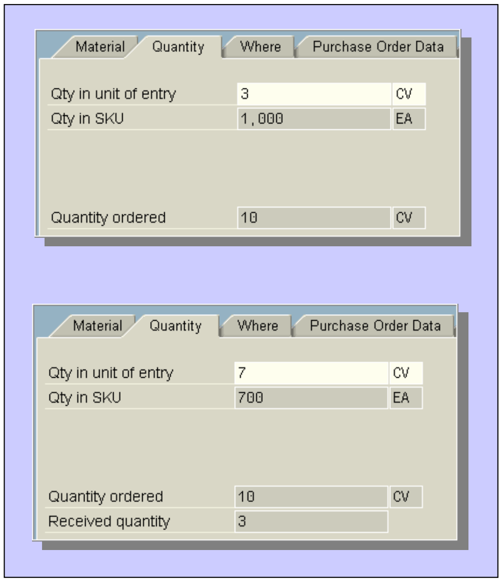
Partial goods receipts mean that *receipt quantity is less than the ordered quantity.*

The open order quantity (quantity still to be received) is displayed on the purchase order line item

Any number of partial goods receipts can be recorded for a PO line item up to the ordered quantity.

Over deliveries are not allowed in the system!

Partial Goods Receipts cont'd



Qty in unit of entry	3	CV
Qty in SKU	1,000	EA
Quantity ordered	10	CV

Qty in unit of entry	7	CV
Qty in SKU	700	EA
Quantity ordered	10	CV
Received quantity	3	

1st Receipt:

Quantity ordered = 10

1st receipt quantity = 3

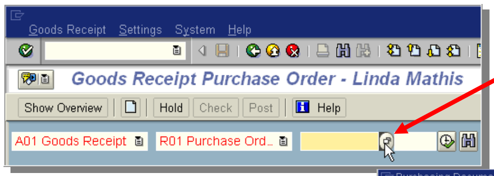
2nd Receipt:

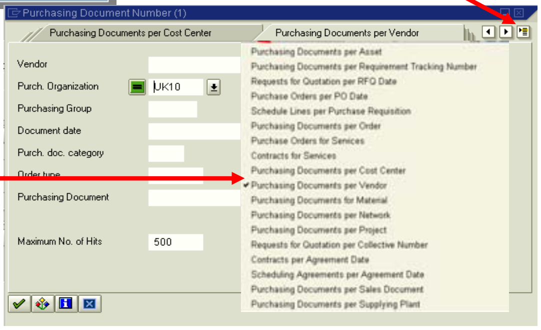
Open order qty. = 7

The open order quantity is displayed for the next receipt

GR for PO Number Unknown

- If the PO number is not on the accompanying paperwork for the goods receipt, you may search for the PO using the F4 (possible options) key





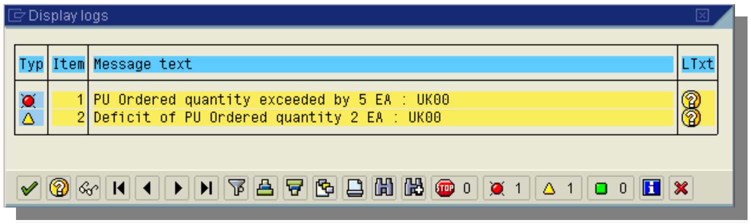
Purch. Organization: UK10

Maximum No. of Hits: 500

Click on the List Selection icon and SAP displays a list of all possible search criteria

Under/Over-Delivery Tolerances

- The Under- and Over-delivery tolerances are set in the purchase order.
- SAP will issue warnings and/or error messages for under- and over-deliveries
  - Under-tolerance – soft warning message △
  - Over-tolerance – hard error message ●



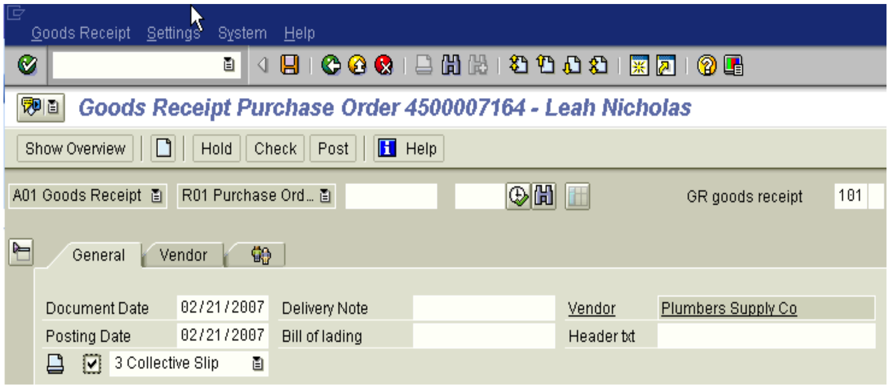
Typ	Item	Message text	LTxt
●	1	PU Ordered quantity exceeded by 5 EA : UK00	?
△	2	Deficit of PU Ordered quantity 2 EA : UK00	?

When entering the actual quantity received, SAP compares this quantity with the purchase order quantity and identifies under- or over-deliveries.

- As a rule, under-deliveries are allowed. If the quantity of goods received is smaller than the ordered quantity, this is interpreted as a partial delivery and accepted.
- SAP, however, does not allow over-deliveries unless it is specified on the purchase order. A hard error message will occur for over-deliveries outside of the set tolerance.

Printing Goods Receipts Slips

- Goods receipts transactions can be printed to a pre-defined printer
- Select (3) Collective Slip – Includes all items in the goods receipt



Goods Receipt Purchase Order 4500007164 - Leah Nicholas

A01 Goods Receipt
R01 Purchase Ord...
GR goods receipt 101

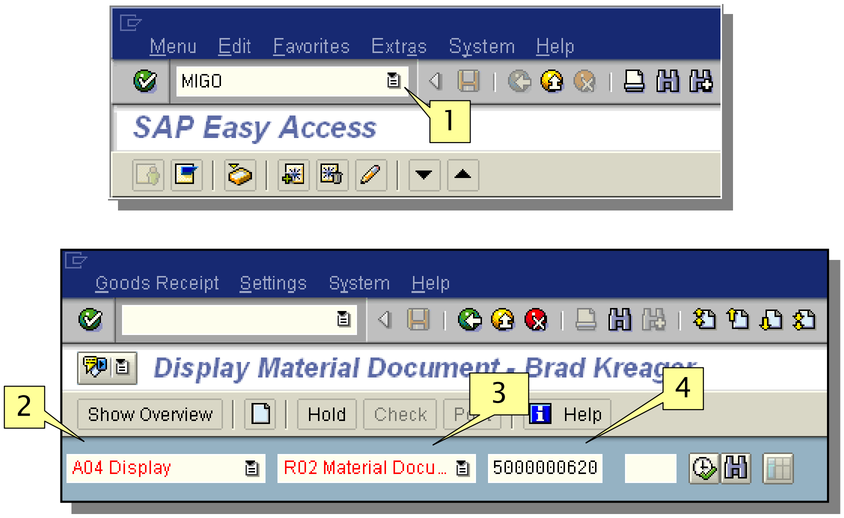
Document Date 02/21/2007
Posting Date 02/21/2007
Delivery Note
Bill of lading
Vendor Plumbers Supply Co
Header txt
☑ 3 Collective Slip

Version for printing of GR/GI slip is optional

Collective slip (version 3)
In this case, a collective slip including all the items in a document is printed.

If the box is selected printing will occur at time of posting.

Display Material Document – MIGO



MIGO

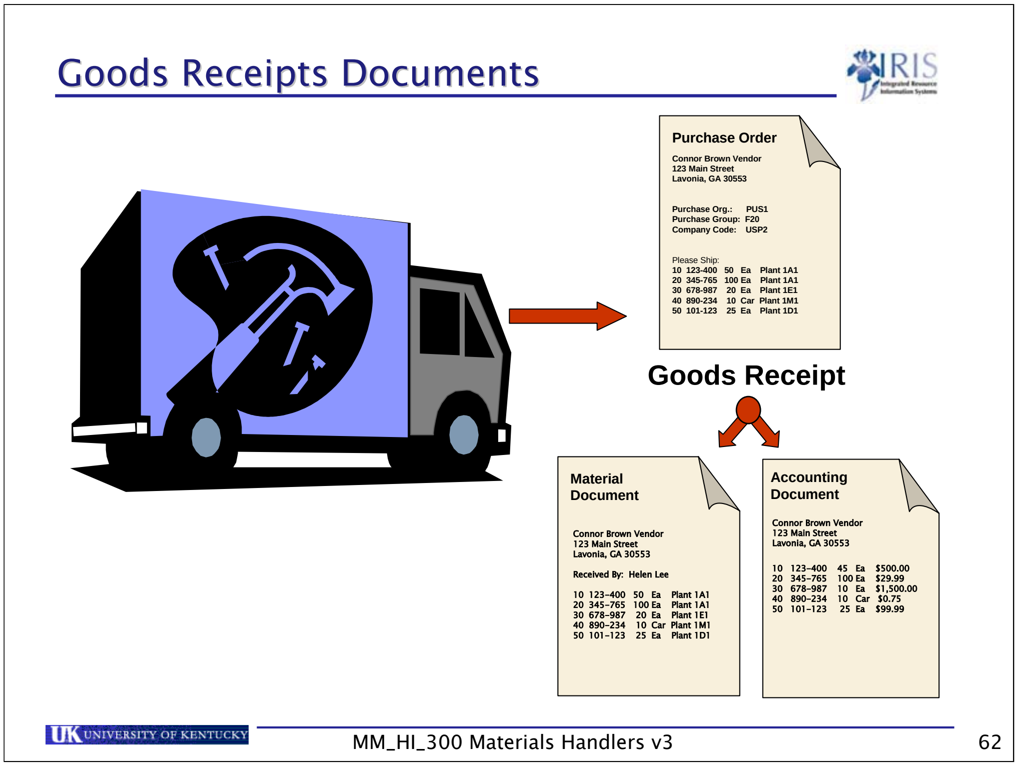
A04 Display

R02 Material Docu...

5000000620

To view the Goods Receipt(s) for a purchase order using MIGO:

1. From the SAP Easy Access screen type MIGO in the Command Field on the Standard Toolbar and press the Enter key (type /nMIGO if already on another screen)
2. Change the Transaction Variant to “A04 Display”
3. The next field to the right should automatically change to “R02 Material Document” – If not, change accordingly
4. Enter the Material Document number assigned upon completing the goods receipt (Note: the last material document created in MIGO will default)
5. Click on the Enter icon in the Standard Toolbar or press the Enter key



Goods Receipts Documents

Purchase Order

Connor Brown Vendor
123 Main Street
Lavonia, GA 30553

Purchase Org.: PUS1
Purchase Group: F20
Company Code: USP2

Please Ship:

10	123-400	50	Ea	Plant 1A1
20	345-765	100	Ea	Plant 1A1
30	678-987	20	Ea	Plant 1E1
40	890-234	10	Car	Plant 1M1
50	101-123	25	Ea	Plant 1D1

Goods Receipt

Material Document

Connor Brown Vendor
123 Main Street
Lavonia, GA 30553

Received By: Helen Lee

10	123-400	50	Ea	Plant 1A1
20	345-765	100	Ea	Plant 1A1
30	678-987	20	Ea	Plant 1E1
40	890-234	10	Car	Plant 1M1
50	101-123	25	Ea	Plant 1D1

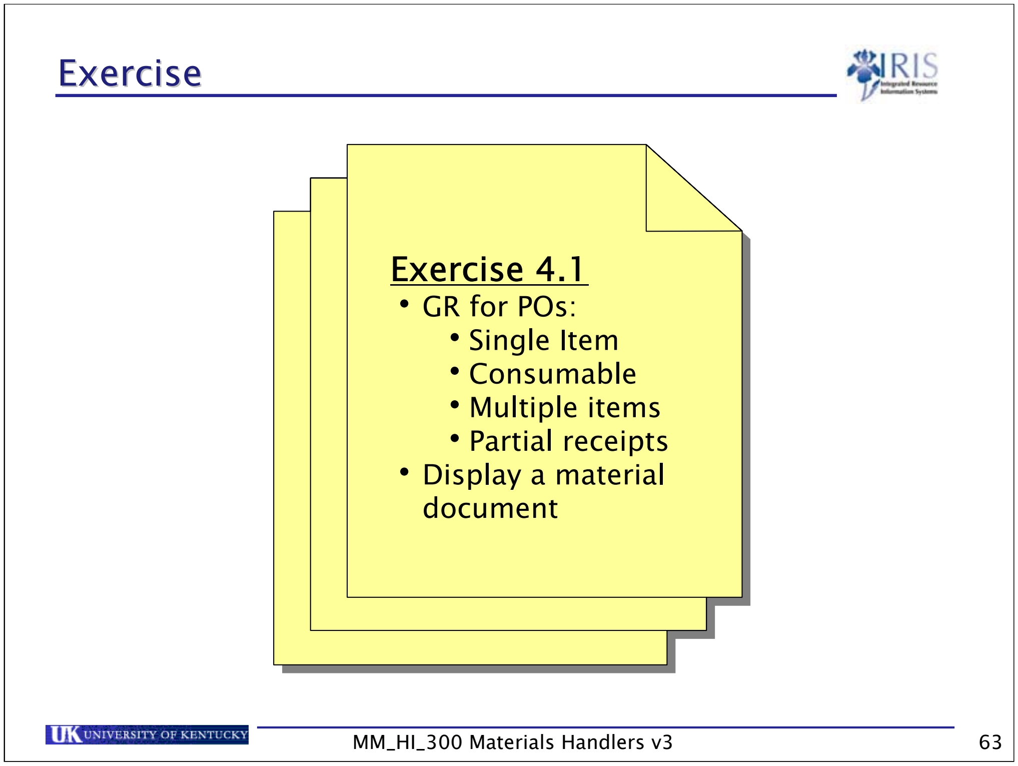
Accounting Document

Connor Brown Vendor
123 Main Street
Lavonia, GA 30553

10	123-400	45	Ea	$500.00
20	345-765	100	Ea	$29.99
30	678-987	10	Ea	$1,500.00
40	890-234	10	Car	$0.75
50	101-123	25	Ea	$99.99

When material is received and put into inventory, material and accounting documents are created automatically.

A material document is used as proof of the movement and as a source of information for any other applications involved. The material document can be printed automatically at the time the goods receipt is posted or manually by clicking on the appropriate icon.

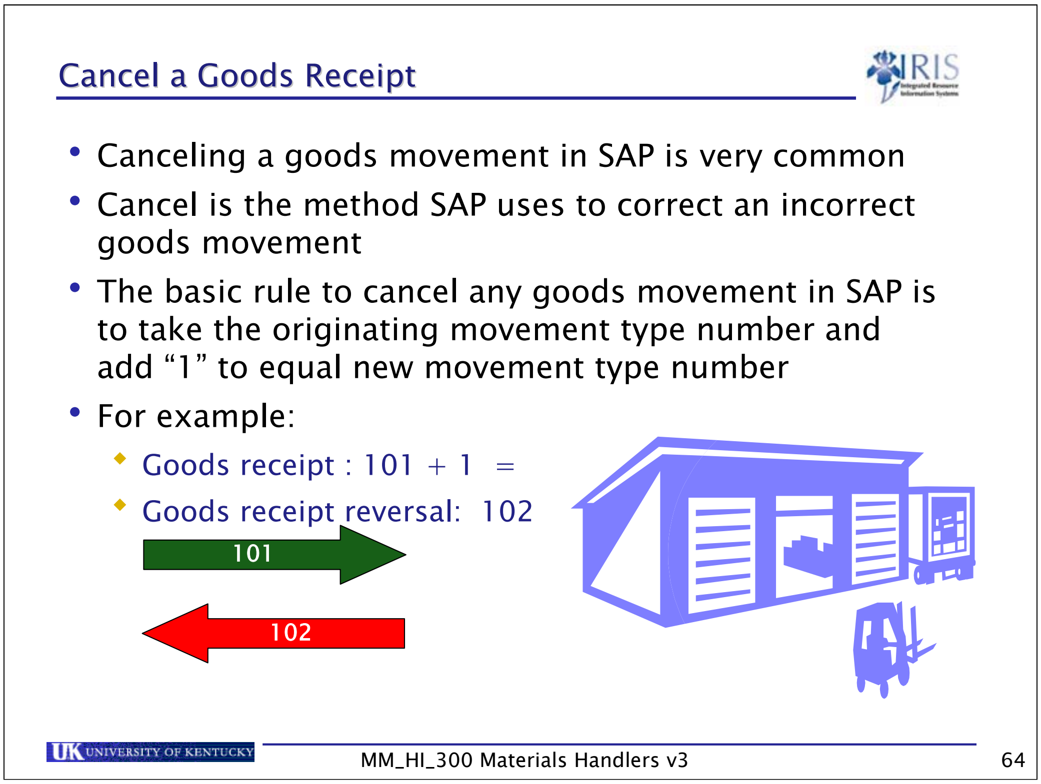


Exercise

Exercise 4.1

- GR for POs:
  - Single Item
  - Consumable
  - Multiple items
  - Partial receipts
- Display a material document

Read Slide



Cancel a Goods Receipt

- Canceling a goods movement in SAP is very common
- Cancel is the method SAP uses to correct an incorrect goods movement
- The basic rule to cancel any goods movement in SAP is to take the originating movement type number and add “1” to equal new movement type number
- For example:
  - Goods receipt : 101 + 1 =
  - Goods receipt reversal: 102

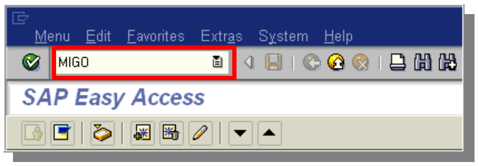
UK UNIVERSITY OF KENTUCKY

MM_HI_300 Materials Handlers v3 64

Reasons to cancel / reverse a goods receipt

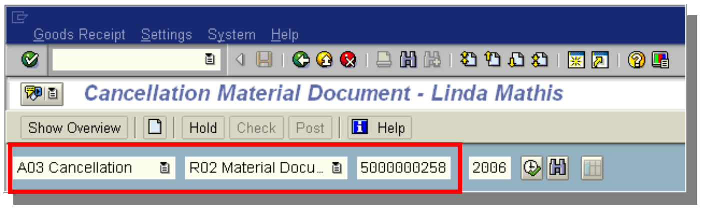
- The wrong quantity was entered
- The goods receipt is entered against the wrong purchase order

Cancel a Goods Receipt Process – 1



MIGO

- From the SAP Easy Access menu, enter MIGO in the Command field and press the Enter key.
- SAP will navigate to the MIGO transaction



Cancellation Material Document - Linda Mathis

A03 Cancellation | R02 Material Docu.. | 5000000258 | 2006

- Select the transaction variant (A03) "Cancellation"
- The reference document (R02) Material document defaults
- Enter the material document for the GR and press the Enter key
- SAP will display the details of the material document

Note: if the material document number is not known, go to ME23N – PO History. The material document for the GR is displayed.

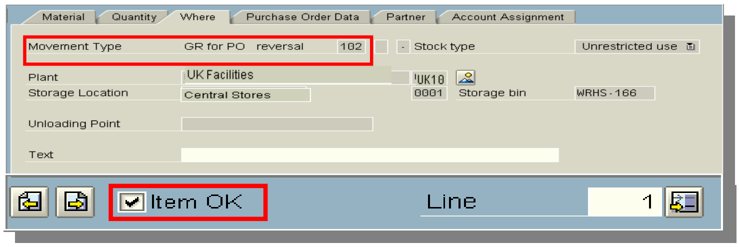
◆Before canceling a goods receipt, you must verify whether or not an invoice has been posted using the PO History tab (ME23N).

◆A single line item or the entire goods receipt may be cancelled.

◆Once a goods receipt has been posted, you cannot change the quantity. You must cancel the line item on the goods receipt.

Cancel a Goods Receipt Process – 2

- Click on the Where tab – The movement type is 102
- Click in Text field and type reason for cancellation
- Select the Item OK checkbox



Movement Type GR for PO reversal 102

Stock type Unrestricted use

Plant UK Facilities UK10

Storage Location Central Stores 0001

Storage bin WRHS-166

Unloading Point

Text

☑ Item OK

Line 1

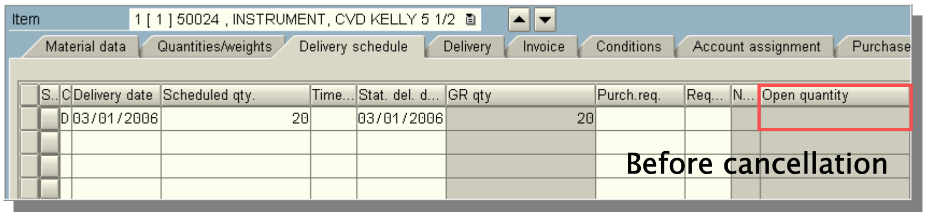
Click on the Post button or the Post icon Post

◆The entire line item is canceled. Changes cannot be made to any of the information. In the case of multiple line items on the material document, you may cancel individual line items.

◆When the cancellation is posted, the system reverses the accounting entries and the receipt quantity in the purchase order.

Cancel a Goods Receipt Process – 3

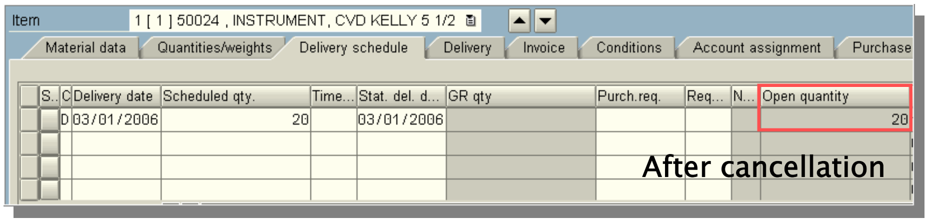
- When the transaction is posted, SAP will update the Open Order quantity on the purchase order
- The vendor can resend the correct material



Item 1 [1] 50024 , INSTRUMENT, CVD KELLY 5 1/2

S..	C	Delivery date	Scheduled qty.	Time...	Stat. del. d...	GR qty	Purch.req.	Req...	N...	Open quantity
	D	03/01/2006	20		03/01/2006	20				

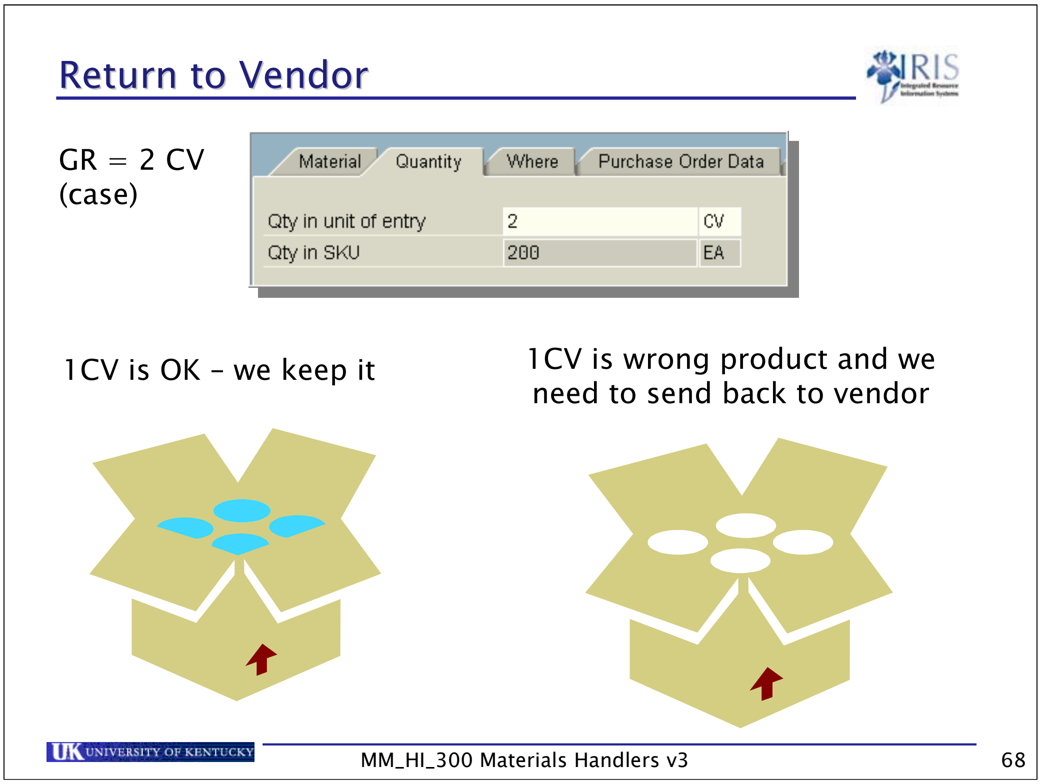
Before cancellation



Item 1 [1] 50024 , INSTRUMENT, CVD KELLY 5 1/2

S..	C	Delivery date	Scheduled qty.	Time...	Stat. del. d...	GR qty	Purch.req.	Req...	N...	Open quantity
	D	03/01/2006	20		03/01/2006					20

After cancellation



Return to Vendor

GR = 2 CV
(case)

Material | Quantity | Where | Purchase Order Data

Qty in unit of entry	2	CV
Qty in SKU	200	EA

1CV is OK – we keep it

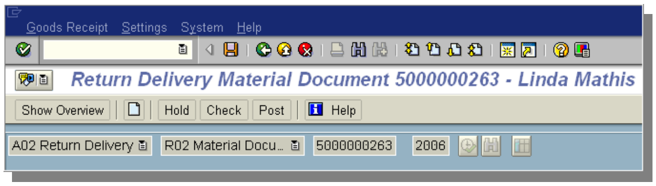
1CV is wrong product and we need to send back to vendor

MM_HI_300 Materials Handlers v3 68

There are reasons to return material to a vendor. For example:

1. The incorrect material was sent but was not apparent until the case was opened
2. The material was damaged
3. **YOU CAN ADD OTHER REASONS HERE!!!!!!**

Return to Vendor Process – 1

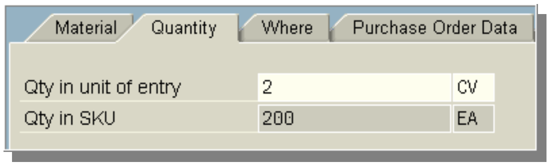


Return Delivery Material Document 5000000263 - Linda Mathis

A02 Return Delivery | R02 Material Docu.. | 5000000263 | 2006

Transaction Variant = (A02) Return Delivery

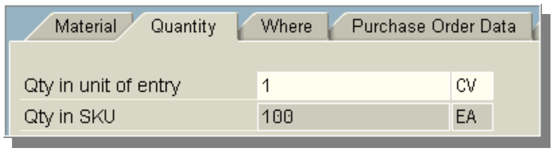
Reference Document = (R02) Material Document for original GR



Qty in unit of entry: 2 CV

Qty in SKU: 200 EA

SAP defaults the GR quantity



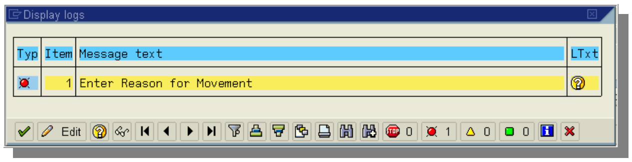
Qty in unit of entry: 1 CV

Qty in SKU: 100 EA

Quantity ***can be*** changed to return ***ONLY*** the damaged quantity (1 CV)

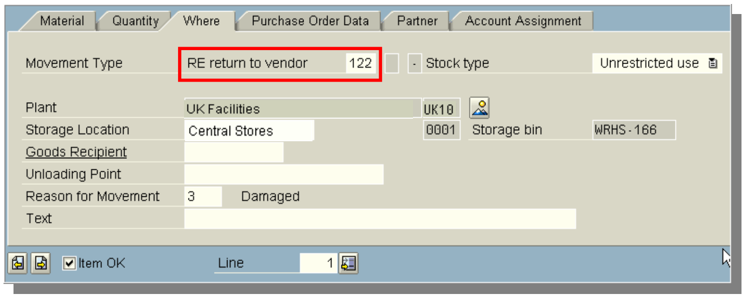
UK10

Return to Vendor Process – 2



Typ	Item	Message text	LTxt
●	1	Enter Reason for Movement	?

Return to Vendor transaction require a Reason code



Movement Type RE return to vendor 122
Stock type Unrestricted use
Plant UK Facilities UK10
Storage Location Central Stores 0001
Storage bin WRHS-166
Goods Recipient
Unloading Point
Reason for Movement 3 Damaged
Text
☑ Item OK
Line 1

Click on the Where tab

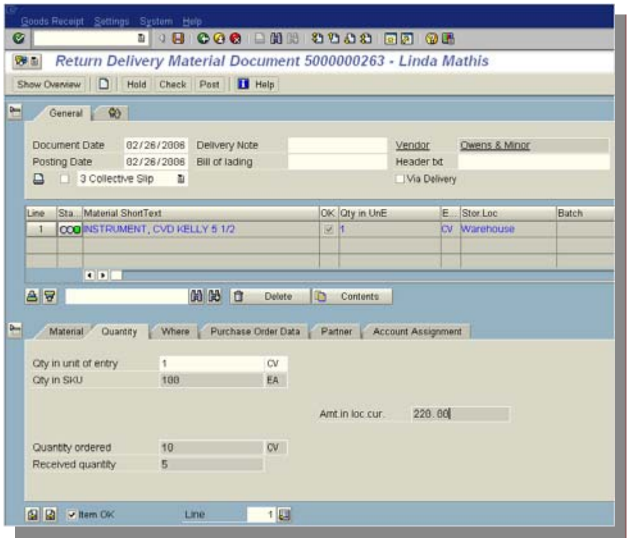
Use the F4 Possible Options key s to select the appropriate reason for the return

*Note the movement type is a 122

Return to Vendor Process - 3

- Select the Post button or the Post icon

Post



Return Delivery Material Document 5000000263 - Linda Mathis

Document Date 02/26/2006

Posting Date 02/26/2006

Delivery Note

Bill of lading

Vendor Owens & Minor

Header txt

3 Collective Slip

☐ Via Delivery

Line	Sta...	Material ShortText	OK	Qty in UnE	E...	Stor.Loc	Batch
1		INSTRUMENT, CVD KELLY 5 1/2	☑	1	CV	Warehouse	

Qty in unit of entry 1 CV

Qty in SKU 100 EA

Amt.in loc.cur. 220.00

Quantity ordered 10 CV

Received quantity 5

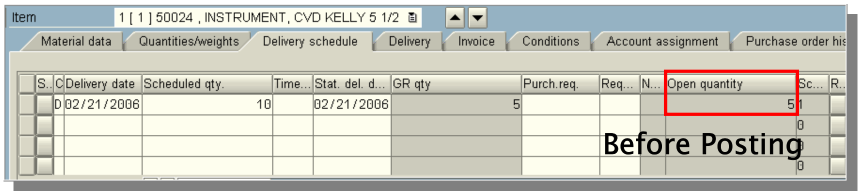
☑ Item OK

Line 1

When the transaction is posted, SAP will change the Open Order quantity to the amount returned to the vendor

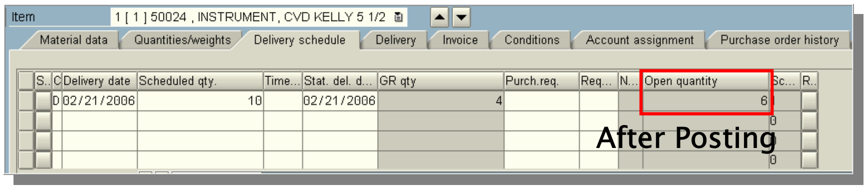
Return to Vendor Process - 4

- When the transaction is posted, SAP will change the Open Order quantity on the purchase order
- The vendor can resend “good” material



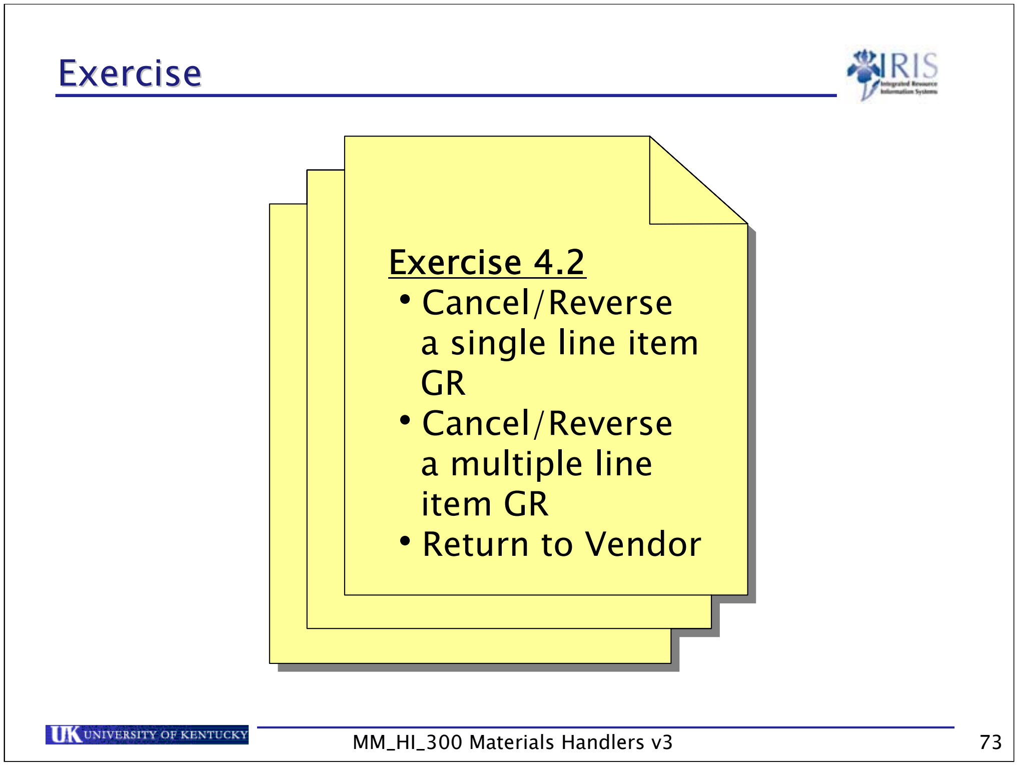
S..	C	Delivery date	Scheduled qty.	Time...	Stat. del. d...	GR qty	Purch.req.	Req...	N...	Open quantity	Sc...	R..
	D	02/21/2006	10		02/21/2006	5				5	1	
											0	
											0	
											0	

Before Posting



S..	C	Delivery date	Scheduled qty.	Time...	Stat. del. d...	GR qty	Purch.req.	Req...	N...	Open quantity	Sc...	R..
	D	02/21/2006	10		02/21/2006	4				6		
											0	
											0	

After Posting

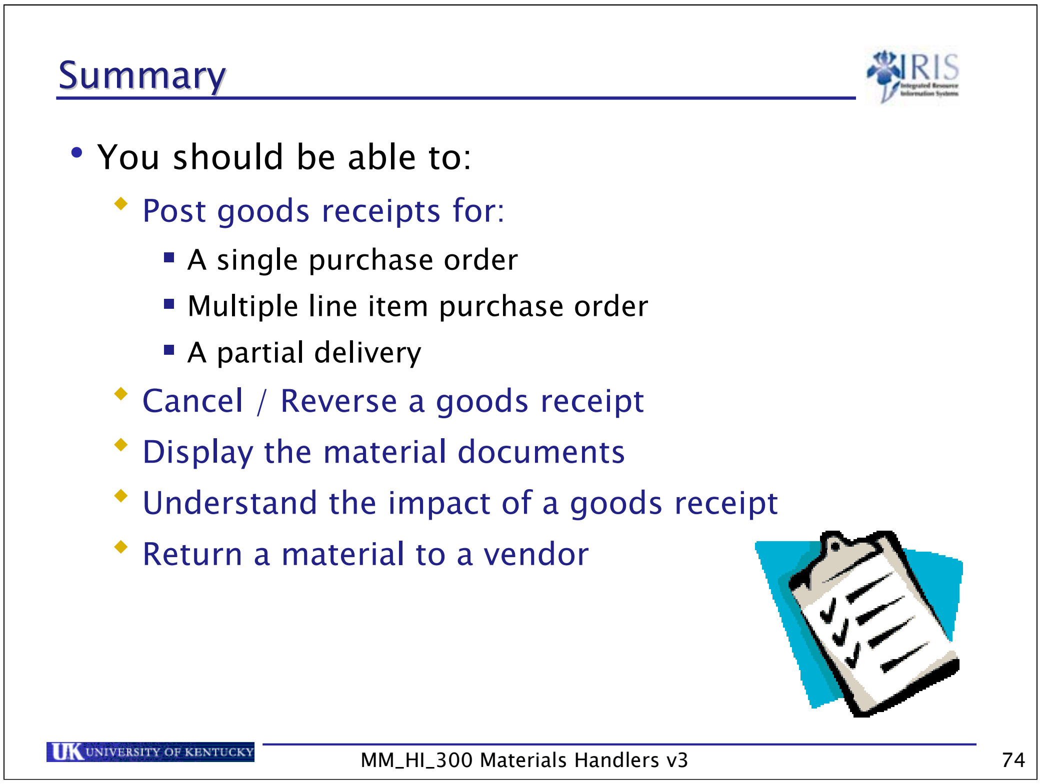


Exercise

Exercise 4.2

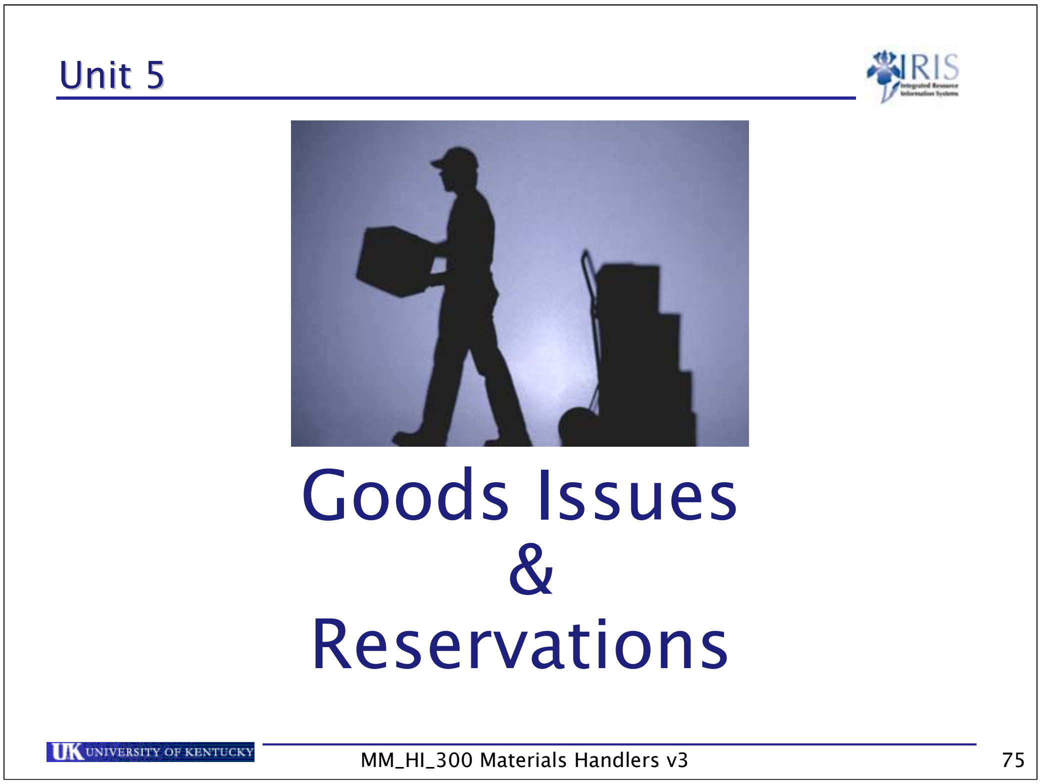
- Cancel/Reverse a single line item GR
- Cancel/Reverse a multiple line item GR
- Return to Vendor

Read Slide



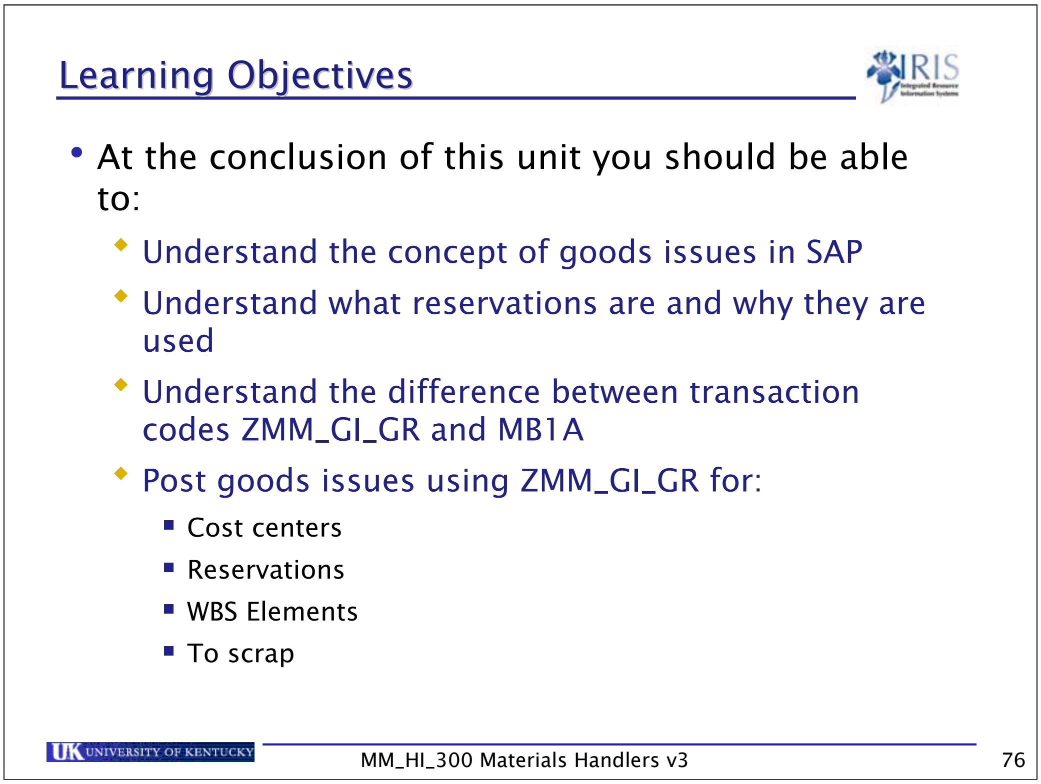
Summary

- You should be able to:
  - Post goods receipts for:
    - A single purchase order
    - Multiple line item purchase order
    - A partial delivery
  - Cancel / Reverse a goods receipt
  - Display the material documents
  - Understand the impact of a goods receipt
  - Return a material to a vendor



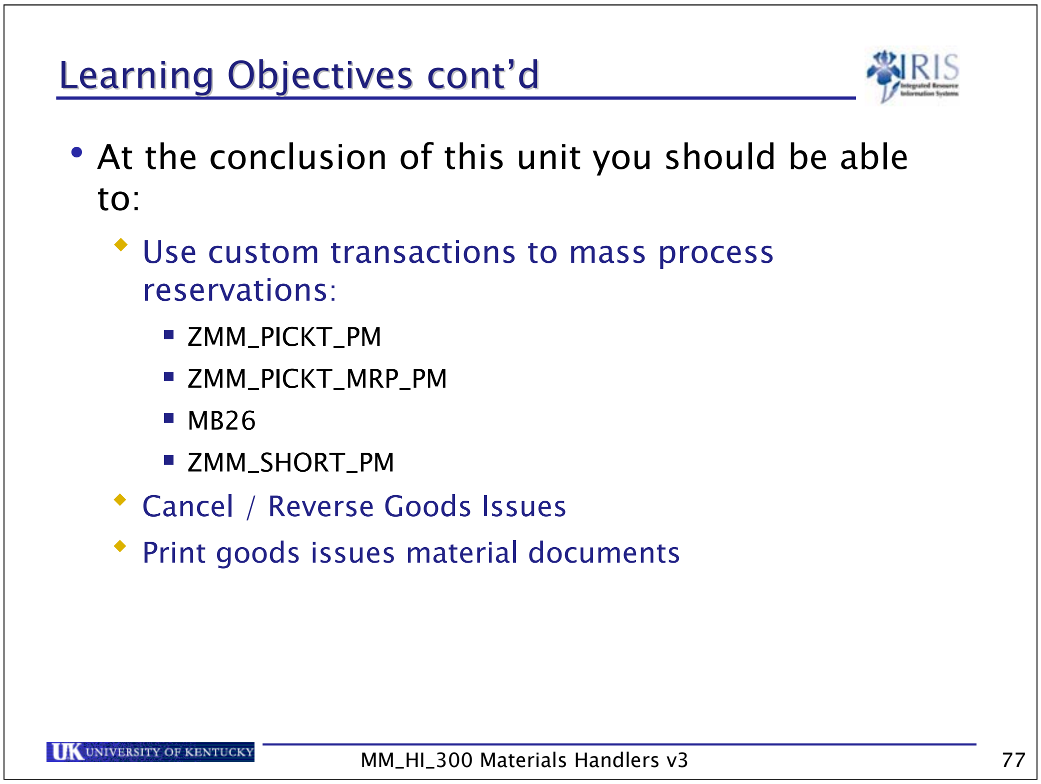
Unit 5

Goods Issues
&
Reservations



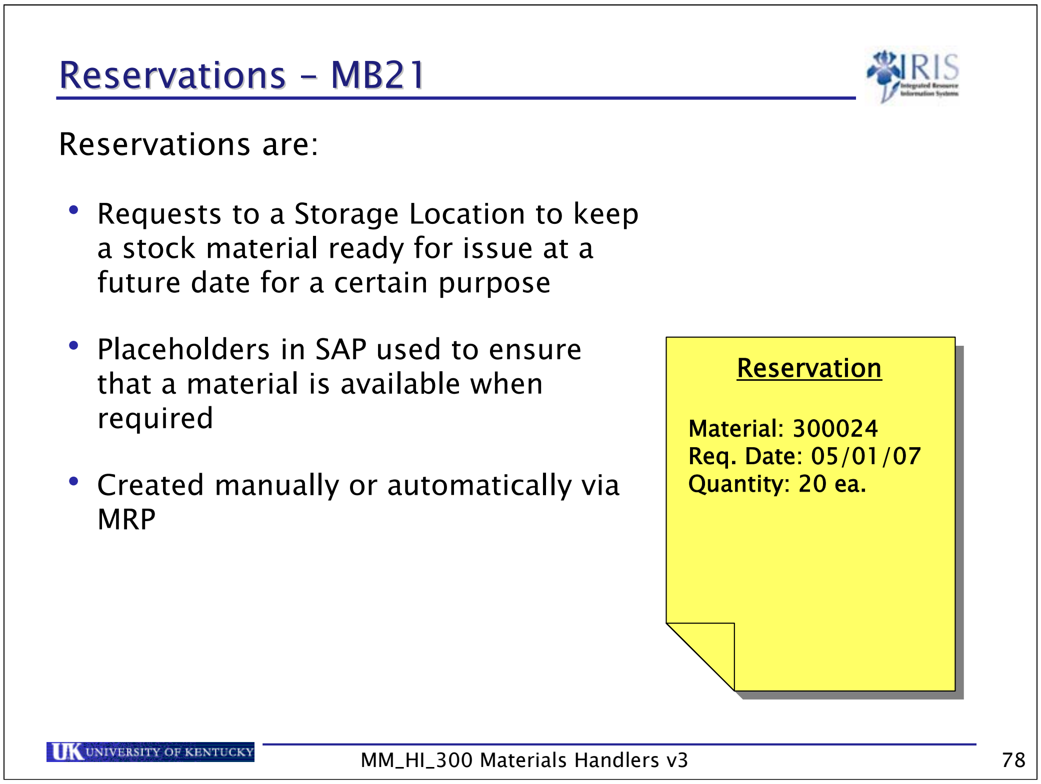
Learning Objectives

- At the conclusion of this unit you should be able to:
  - Understand the concept of goods issues in SAP
  - Understand what reservations are and why they are used
  - Understand the difference between transaction codes ZMM_GI_GR and MB1A
  - Post goods issues using ZMM_GI_GR for:
    - Cost centers
    - Reservations
    - WBS Elements
    - To scrap



Learning Objectives cont'd

- At the conclusion of this unit you should be able to:
  - Use custom transactions to mass process reservations:
    - ZMM_PICKT_PM
    - ZMM_PICKT_MRP_PM
    - MB26
    - ZMM_SHORT_PM
  - Cancel / Reverse Goods Issues
  - Print goods issues material documents



Reservations – MB21

Reservations are:

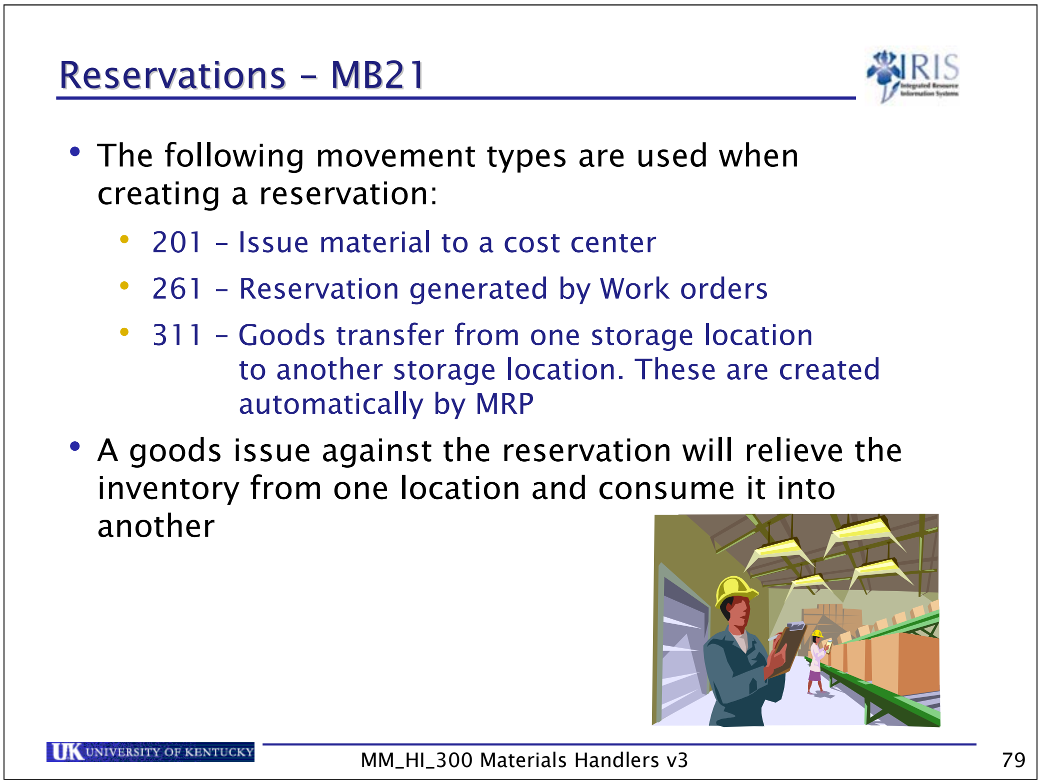
- Requests to a Storage Location to keep a stock material ready for issue at a future date for a certain purpose
- Placeholders in SAP used to ensure that a material is available when required
- Created manually or automatically via MRP

Reservation

Material: 300024
Req. Date: 05/01/07
Quantity: 20 ea.

A reservation contains information that is relevant for the goods issue and for materials planning, for example:

- What? (which material?)
- How much? (in which quantity?)
- When? (for which requirement date?)
- From where? (from which storage location?)
- To where? (to which recipient or customer?)

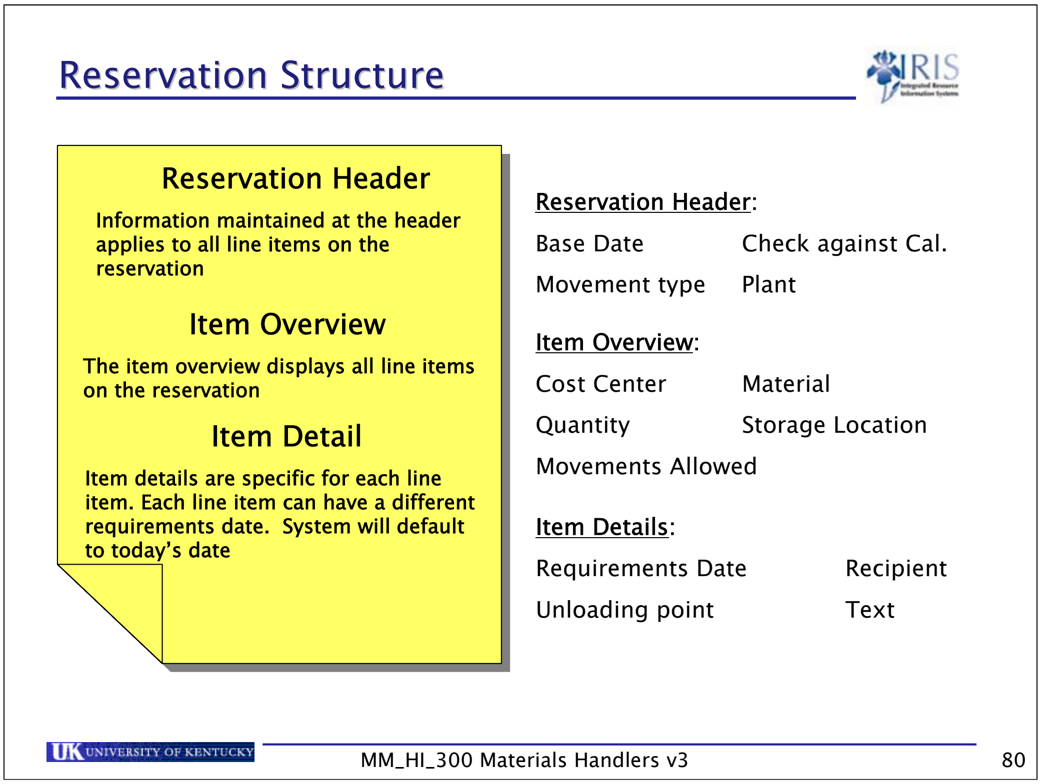


Reservations – MB21

- The following movement types are used when creating a reservation:
  - 201 – Issue material to a cost center
  - 261 – Reservation generated by Work orders
  - 311 – Goods transfer from one storage location to another storage location. These are created automatically by MRP
- A goods issue against the reservation will relieve the inventory from one location and consume it into another

A reservation to movement type 201 would issue a material to a cost center. An example of this would be issuing material number 67 (surgical gown) to a department.

Reservations issued to movement type 311 are goods issued from one storage location to another storage location. These reservations are automatically created when MRP is run.



Reservation Structure

Reservation Header

Information maintained at the header applies to all line items on the reservation

Item Overview

The item overview displays all line items on the reservation

Item Detail

Item details are specific for each line item. Each line item can have a different requirements date. System will default to today's date

Reservation Header:

Base Date
Check against Cal.
Movement type
Plant

Item Overview:

Cost Center
Material
Quantity
Storage Location
Movements Allowed

Item Details:

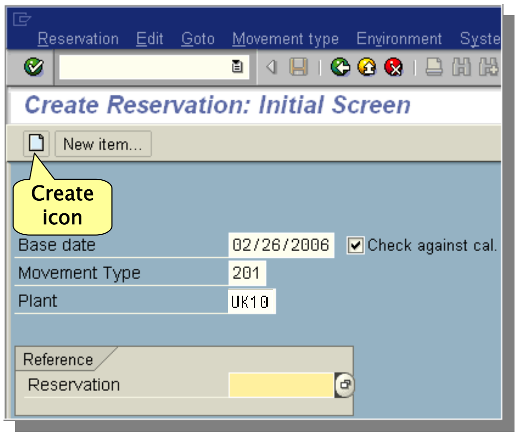
Requirements Date
Recipient
Unloading point
Text

Create a Reservation Process – 1

MB21

SAP Easy Access

- From the SAP Easy Access menu, enter MB21 in the Command field and press the Enter key
- SAP navigates to the transaction



Create Reservation: Initial Screen

Base date 02/26/2006 ☑ Check against cal.

Movement Type 201

Plant UK10

Reference

Reservation

Base date: The date the material is required

Movement type: The type of goods movement used to issue the reservation

Plant: UK10

Press the Enter key, or click on the New item button or the Create icon

Check against cal.: Specifies if the reservation is to be checked against the factory calendar. The system checks the factory calendar to determine whether the dates in the reservation are valid workdays.

Note: Most manual reservations will use the movement type 201. MRP automatically creates the transfer (311) reservations.

Old Term bulk supply order: Request for bulk supplies is received in S&D. MM Tech will create a reservation to the requesting cost center. Warehouse will process reservation and deliver supplies.

Reservation Process – 2

Create Reservation: Collective Processing

Delete item(s)

Movement Type 201 GI for cost center

Goods Recipient Mac

Cost Center 1033151650 THE GERMAN HOU...

Order

Items

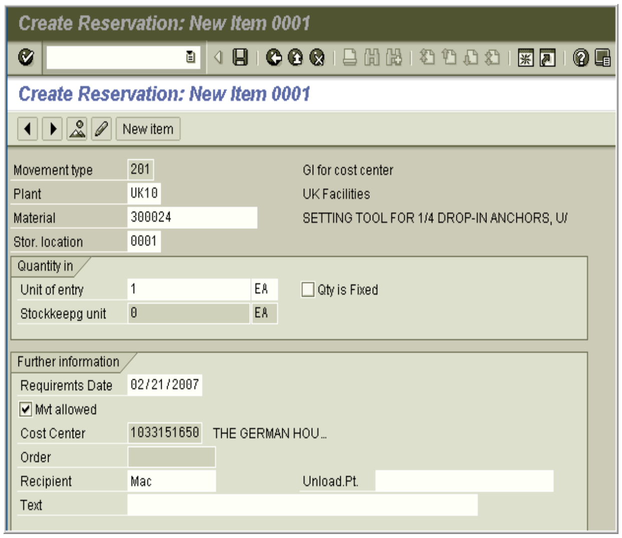
Itm	Material	Quantity in	UnE	Plnt	SLoc	Batch	M
1	300024	1	EA	UK10	0001		☑

Enter the Cost Center, material number, quantity and storage location

M = Movements Allowed (accept the default). Press the Enter key.

To display the details of the line item, double-click on the material number

Reservation Process - 3



Movement type 201 GI for cost center

Plant UK10 UK Facilities

Material 300024 SETTING TOOL FOR 1/4 DROP-IN ANCHORS, U/

Stor. location 0001

Quantity in

Unit of entry 1 EA ☐ Qty is Fixed

Stockkeepg unit 0 EA

Further information

Requiremts Date 02/21/2007

☑ Mvt allowed

Cost Center 1033151650 THE GERMAN HOU...

Order

Recipient Mac Unload.Pt.

Text

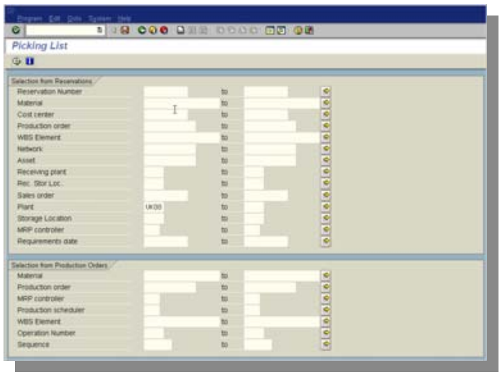
SAP displays the item details for the material.

You may add or change existing information

Click on the Post icon to post the reservation

Note: Additional line items may be added by clicking on the New item button or Overview icon

List of Reservations– MB26

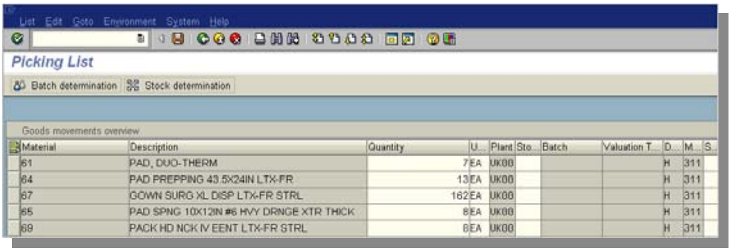


Plant UK00

This transaction can be used to execute various lists to display reservations *before* posting goods movements

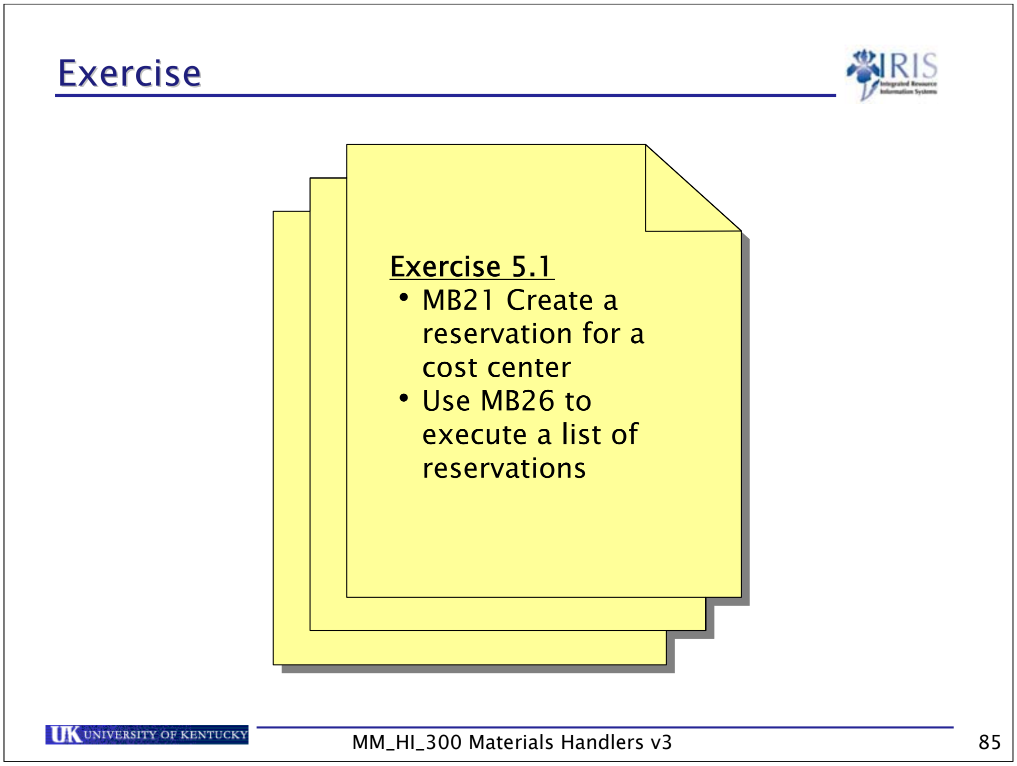
For the purpose of displaying a list of reservations, any combination of material(s), cost centers and requirements date can be used.

SAP displays the reservations that meet the selection criteria



Goods movements overview

Material	Description	Quantity	U...	Plant	Sto...	Batch	Valuation T...	D...	M...	S...
61	PAD, DUO-THERM	7	EA	UK00				H	311	
64	PAD PREPPING 43.5X24IN LTX-FR	13	EA	UK00				H	311	
67	GOWN SURG XL DISP LTX-FR STRL	162	EA	UK00				H	311	
65	PAD SPNG 10X12IN #6 HVY DRNGE XTR THICK	8	EA	UK00				H	311	
69	PACK HD NCK IV EENT LTX-FR STRL	8	EA	UK00				H	311	

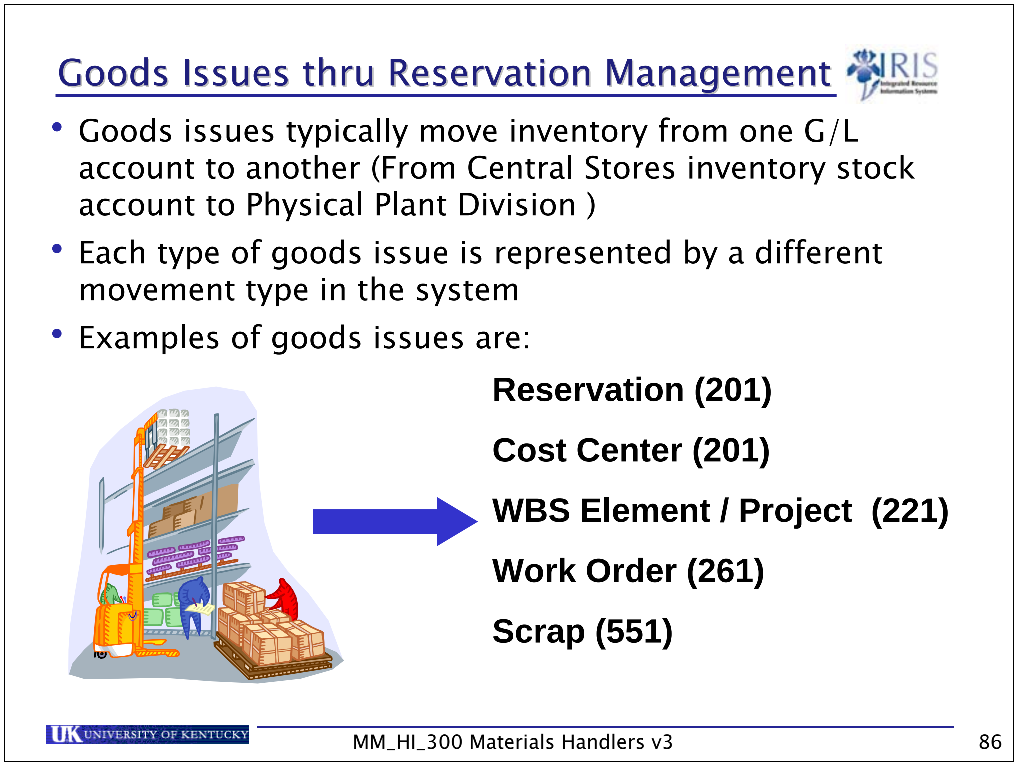


Exercise

Exercise 5.1

- MB21 Create a reservation for a cost center
- Use MB26 to execute a list of reservations

Read Slide



Goods Issues thru Reservation Management

- Goods issues typically move inventory from one G/L account to another (From Central Stores inventory stock account to Physical Plant Division)
- Each type of goods issue is represented by a different movement type in the system
- Examples of goods issues are:

Reservation (201)

Cost Center (201)

WBS Element / Project (221)

Work Order (261)

Scrap (551)

A goods issue (GI) is a goods movement that leads to a reduction in stock. The movement type determines what kind of goods issue takes place. For example a goods issue to a cost center would use a 201 movement type.

The movement type also determines what additional account assignment data is required. For example, a goods issue to a cost center requires the cost center number to which the material is being issued.

A goods issue leads to a reduction in warehouse stock.

Goods issues can be posted with or without reference to other documents in the system (for example, reservations).

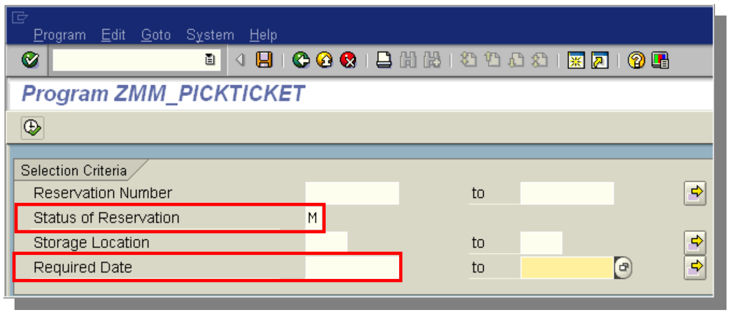
For issues posted with reference to another document, account determination will be carried out automatically.

For issues posted without reference, account information must be entered at the time of the issue (for example, cost center).

Consumption for inventory managed materials is updated automatically in the material master record.

ZMM_PICKT_MRP_PM

- The first step in reservation management is to execute a pick list
- This list will print at designated locations and lists all materials and their quantities that need to be picked from the storage location



Program ZMM_PICKTICKET

Selection Criteria

Reservation Number to

Status of Reservation M

Storage Location to

Required Date to

ZMM_PICKT_MRP_PM has two selection criteria:

Status of Reservation: M or B

Required Date: Today’s date

Status of Reservation must be entered!

- M = Manually created reservations
- B = MRP generated reservations

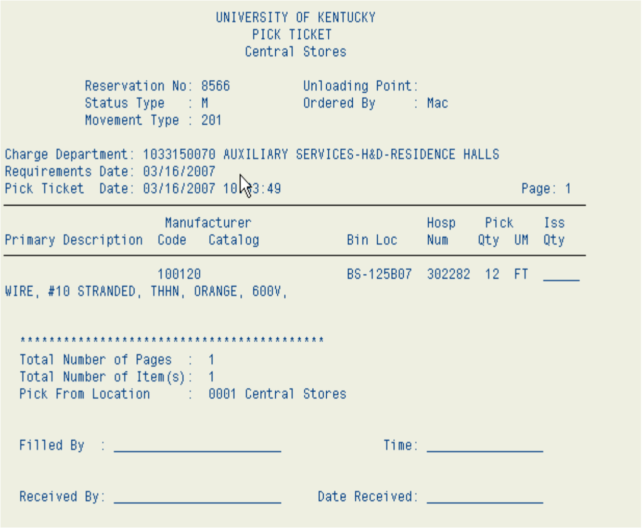
Required Date: This date is today’s date. This will list all the reservations that are to be picked today.

This list must be executed once for manually (M) created reservations and once for MRP (B) generated reservations.

The two status (M&B) cannot be run together!

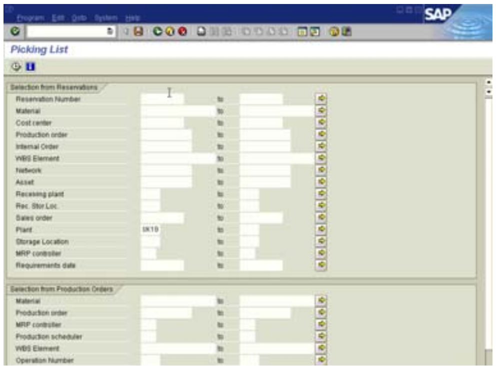
ZMM_PICKT_MRP_PM

- After executing ZMM_PICKT_PM, SAP creates the pick ticket that will tell the storage location what materials to pick
- The list will print at designated printers



```
                         UNIVERSITY OF KENTUCKY
                              PICK TICKET
                             Central Stores

           Reservation No: 8566          Unloading Point:
           Status Type    : M            Ordered By      : Mac
           Movement Type : 201

Charge Department: 1033150070 AUXILIARY SERVICES-H&D-RESIDENCE HALLS
Requirements Date: 03/16/2007
Pick Ticket  Date: 03/16/2007 10[illegible]3:49                          Page: 1
--------------------------------------------------------------------------------
                      Manufacturer                          Hosp    Pick    Iss
Primary Description  Code   Catalog              Bin Loc     Num     Qty  UM  Qty
--------------------------------------------------------------------------------
                     100120                      BS-125B07   302282  12   FT  _____
WIRE, #10 STRANDED, THHN, ORANGE, 600V,


  ******************************************
  Total Number of Pages  :  1
  Total Number of Item(s):  1
  Pick From Location     :  0001 Central Stores


  Filled By  : _______________________           Time: ________________


  Received By: _______________________  Date Received: ________________
```

Posting Goods Movements – MB26



Plant UK10

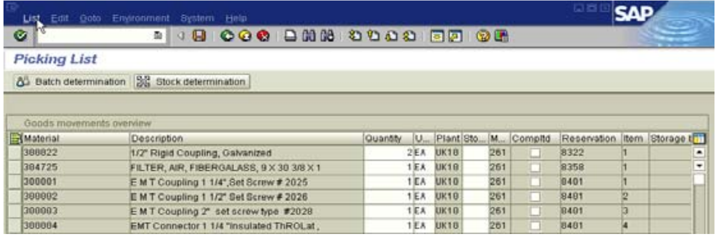
From the SAP Easy Access menu, enter MB26 in the Command field and press the Enter key

SAP navigates to the Picking List screen

Enter a selection criteria such as material, reservation number, or date

Click on the Execute icon or press the F8 key

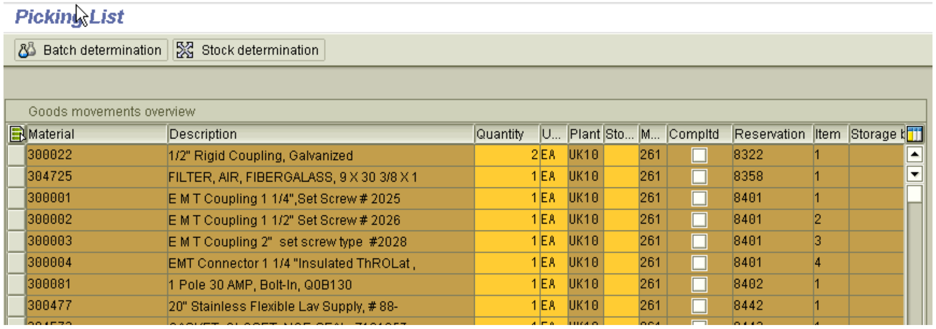
SAP displays the reservations that meet the selection criteria



Material	Description	Quantity	U...	Plant	Sto...	M...	Compltd	Reservation	Item	Storage t
388822	1/2" Rigid Coupling, Galvanized	2	EA	UK10		261	☐	8322	1	
384725	FILTER, AIR, FIBERGALASS, 9 X 30 3/8 X 1	1	EA	UK10		261	☐	8358	1	
300001	E M T Coupling 1 1/4",Set Screw # 2025	1	EA	UK10		261	☐	8401	1	
300002	E M T Coupling 1 1/2" Set Screw # 2026	1	EA	UK10		261	☐	8401	2	
300003	E M T Coupling 2" set screw type #2028	1	EA	UK10		261	☐	8401	3	
300004	EMT Connector 1 1/4 "Insulated ThROLat ,	1	EA	UK10		261	☐	8401	4	

Picking List

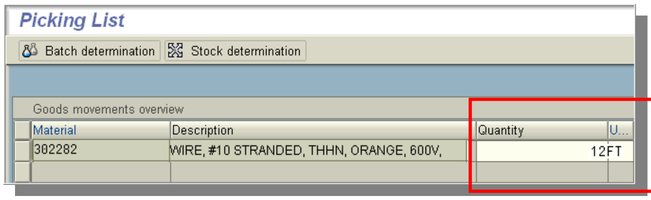
- Select the line items to be posted
- Click on the Stock Determination button to default the storage location
- Click on the Post icon to post the goods movements



Material	Description	Quantity	U...	Plant	Sto...	M...	Compltd	Reservation	Item	Storage b
300022	1/2" Rigid Coupling, Galvanized	2	EA	UK10		261	☐	8322	1	
304725	FILTER, AIR, FIBERGALASS, 9 X 30 3/8 X 1	1	EA	UK10		261	☐	8358	1	
300001	E M T Coupling 1 1/4",Set Screw # 2025	1	EA	UK10		261	☐	8401	1	
300002	E M T Coupling 1 1/2" Set Screw # 2026	1	EA	UK10		261	☐	8401	2	
300003	E M T Coupling 2" set screw type #2028	1	EA	UK10		261	☐	8401	3	
300004	EMT Connector 1 1/4 "Insulated ThROLat ,	1	EA	UK10		261	☐	8401	4	
300081	1 Pole 30 AMP, Bolt-In, Q0B130	1	EA	UK10		261	☐	8402	1	
300477	20" Stainless Flexible Lav Supply, # 88-	1	EA	UK10		261	☐	8442	1	

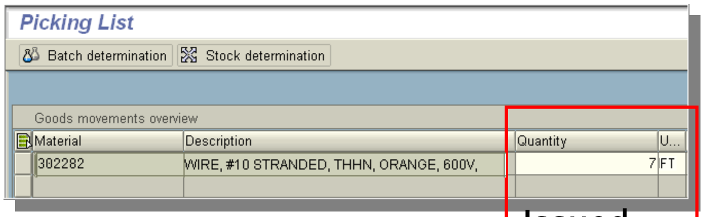
Note: As soon as the transaction is posted, the inventory for the selected line items is reduced

Completion Indicator



Material	Description	Quantity	U...
302282	WIRE, #10 STRANDED, THHN, ORANGE, 600V,	12	FT

Reservation Qty. = 12

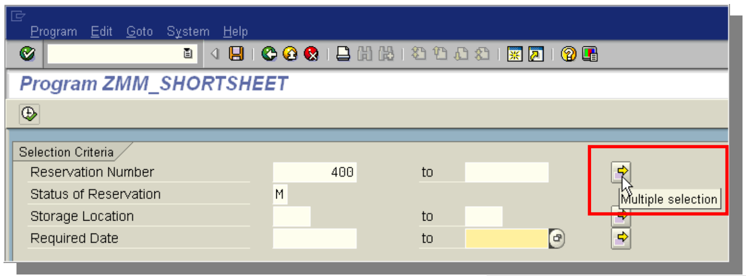


Material	Description	Quantity	U...
302282	WIRE, #10 STRANDED, THHN, ORANGE, 600V,	7	FT

Issued Qty. = 7

Scroll right to Completion Indicator column. This may or ***may not*** be set based on the type of order.

Confirm Picked Quantities – ZMM_SHORT_PM



Program ZMM_SHORTSHEET

Selection Criteria

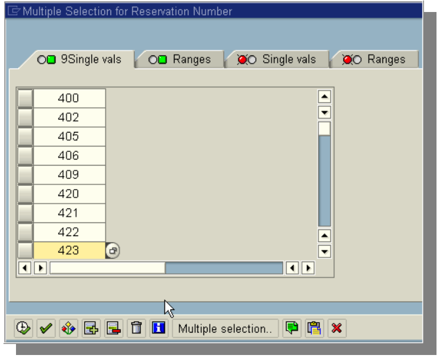
Reservation Number 400 to

Status of Reservation M

Storage Location to

Required Date to

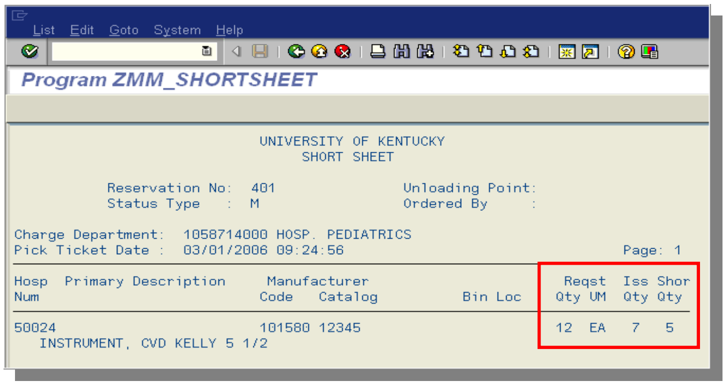
Multiple selections allow you to enter a list of reservation numbers instead of entering a range of reservation numbers


Multiple Selection for Reservation Number

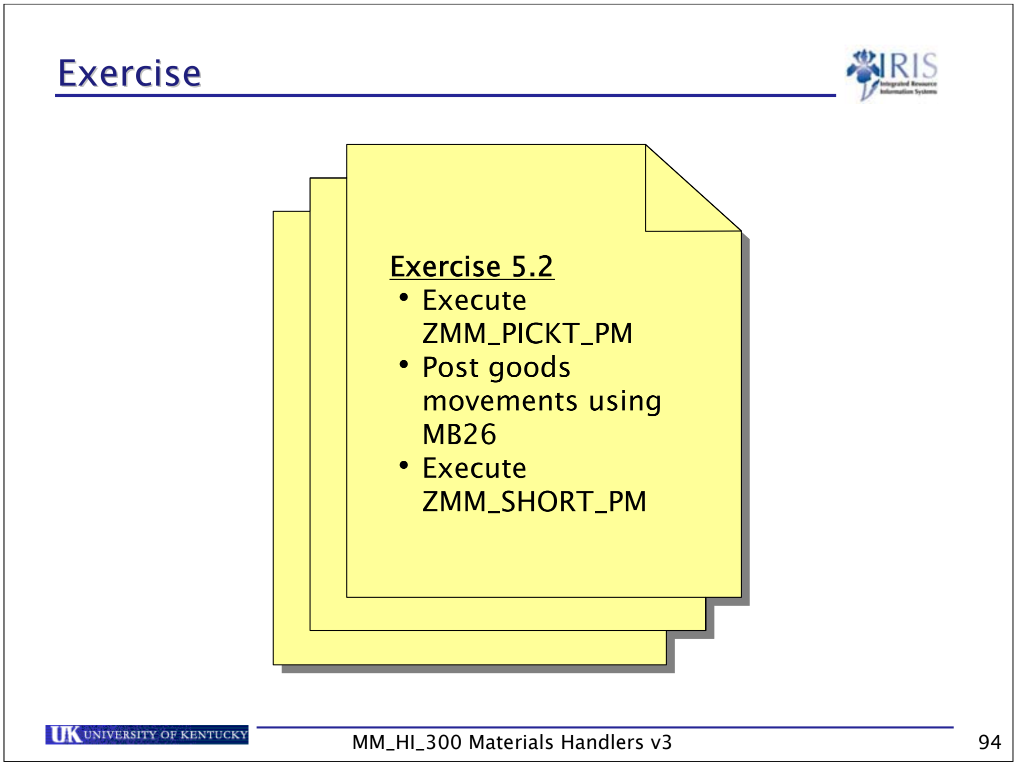
400
402
405
406
409
420
421
422
423

ZMM_SHORT_PM

- After picking the materials from the warehouse, this transaction is printed and sent with the material
- It displays the requested quantity, the picked quantity and shortages (if applicable)
- The shortage quantity ***may or may not*** be filled. If it has been determined items with short quantities should be filled, the completion indicator tab must be left unchecked on the zmm_pickt transaction.



```
                         UNIVERSITY OF KENTUCKY
                              SHORT SHEET

           Reservation No:  401                 Unloading Point:
           Status Type    :  M                  Ordered By      :

Charge Department:  1058714000 HOSP. PEDIATRICS
Pick Ticket Date :  03/01/2006 09:24:56                            Page: 1
--------------------------------------------------------------------------
Hosp  Primary Description     Manufacturer                    Reqst  Iss Shor
Num                          Code    Catalog        Bin Loc   Qty UM  Qty Qty
--------------------------------------------------------------------------
50024                        101580 12345                     12  EA   7   5
   INSTRUMENT, CVD KELLY 5 1/2
```



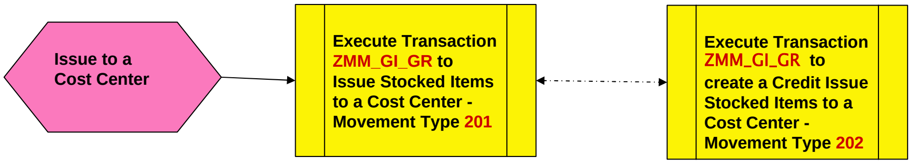
Exercise

Exercise 5.2

- Execute ZMM_PICKT_PM
- Post goods movements using MB26
- Execute ZMM_SHORT_PM

Read Slide

Process Flow: GI to a Cost Center



Issue to a Cost Center

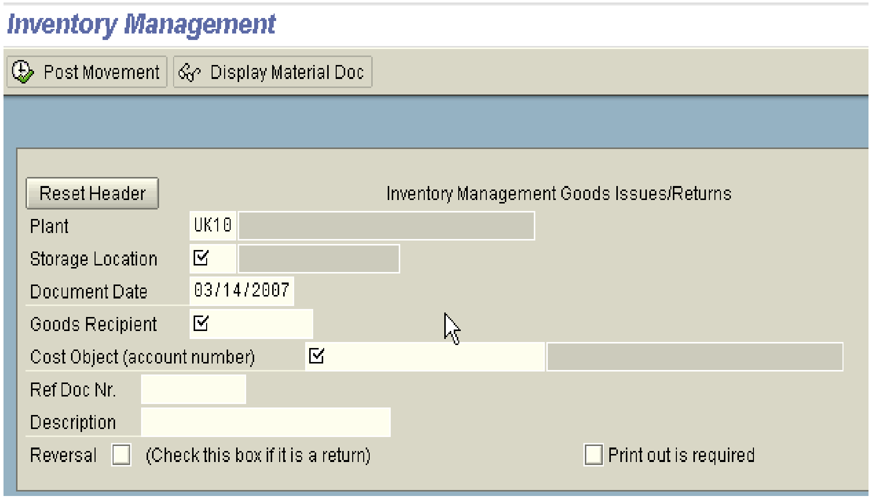
Execute Transaction ZMM_GI_GR to Issue Stocked Items to a Cost Center - Movement Type 201

Execute Transaction ZMM_GI_GR to create a Credit Issue Stocked Items to a Cost Center - Movement Type 202

R3P-MM-ISSUER

Note: GI = Goods Issue

ZMM_GI_GR Goods Issue to Cost Object



Inventory Management Goods Issues/Returns

Plant: UK10

Storage Location: ☑

Document Date: 03/14/2007

Goods Recipient: ☑

Cost Object (account number): ☑

Ref Doc Nr.

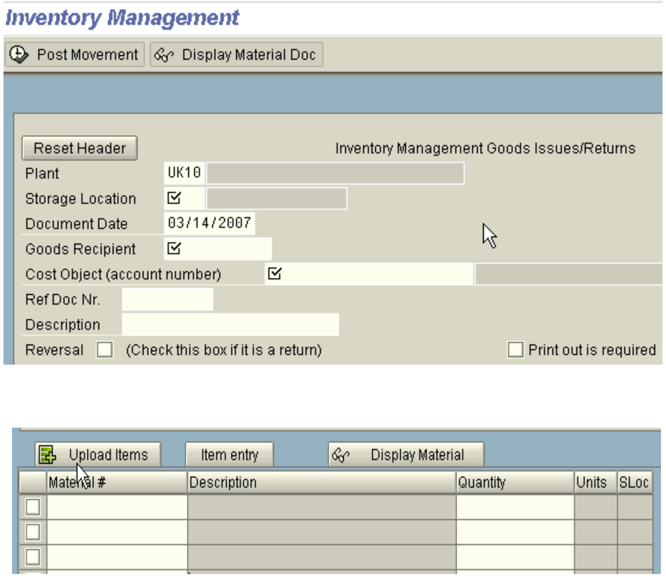
Description

Reversal ☐ (Check this box if it is a return)

☐ Print out is required

MIGO can also be used to issue materials to a cost center. The transaction variant must be changed and the referencing document is “Others”.

ZMM_GI_GR Goods Issue to Cost Object



Plant UK10

Storage Location ☑

Document Date 03/14/2007

Goods Recipient ☑

Cost Object (account number) ☑

Ref Doc Nr.

Description

Reversal ☐ (Check this box if it is a return)

☐ Print out is required

1. Enter the Plant
2. Enter the storage location
3. Enter the goods recipient
4. Enter the Cost Object number
5. Material Document can be printed by selecting the print out box.

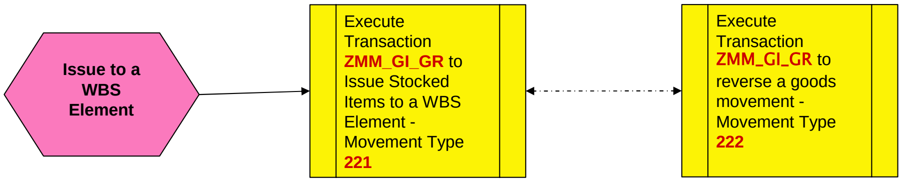
2 ways to generate goods issues.

1. Manual Data entry
2. Scanner download

To return/credit a material, Complete transaction by repeating steps above, but check “Reversal” box.

Process Flow: GI to a WBS Element

To a WBS Element



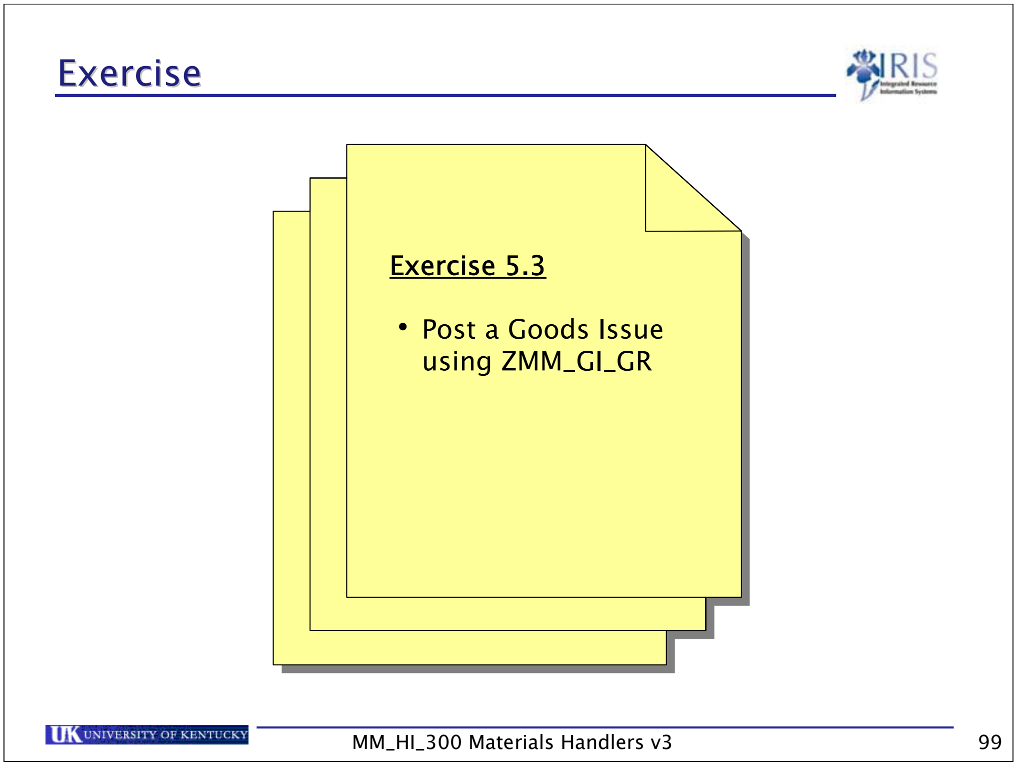
Issue to a WBS Element

Execute Transaction **ZMM_GI_GR** to Issue Stocked Items to a WBS Element - Movement Type **221**

Execute Transaction **ZMM_GI_GR** to reverse a goods movement - Movement Type **222**

R3P-MM-ISSUER

Note: GI = Goods Issue

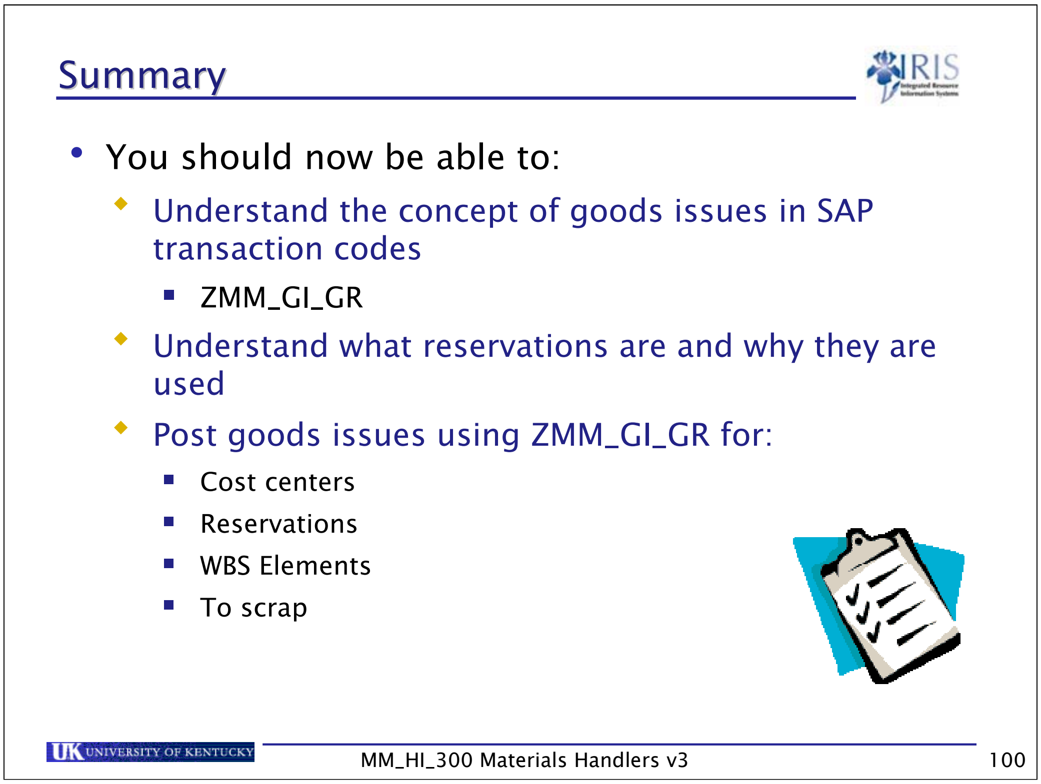


Exercise

Exercise 5.3

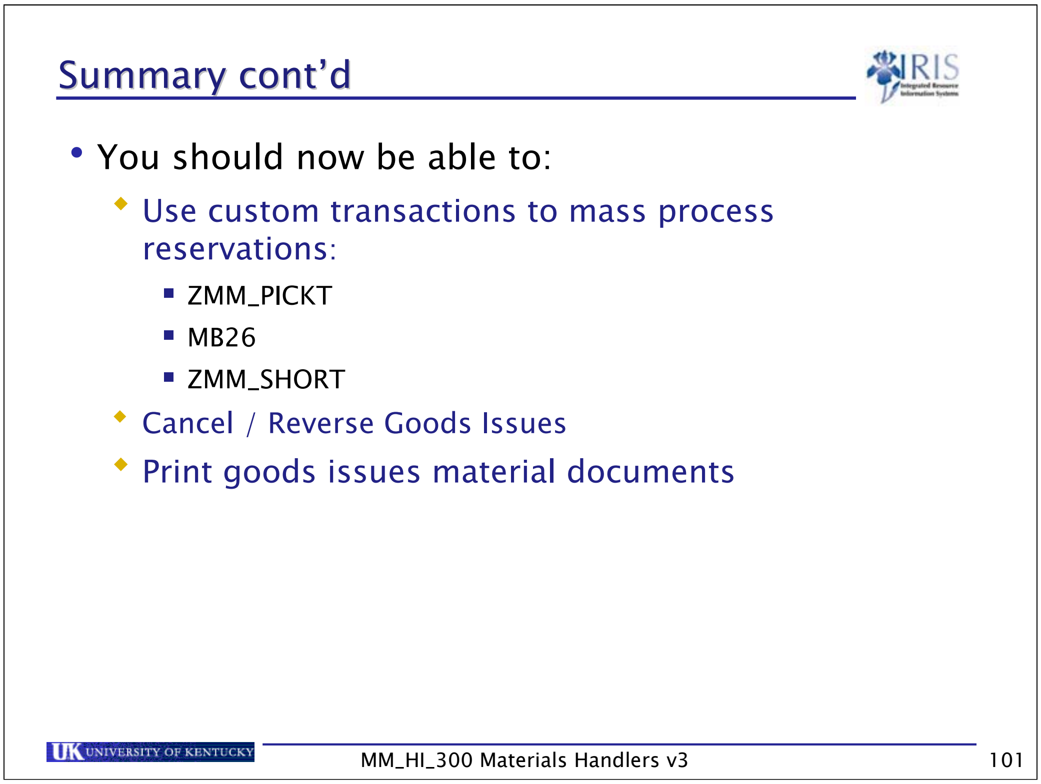
- Post a Goods Issue using ZMM_GI_GR

Read Slide



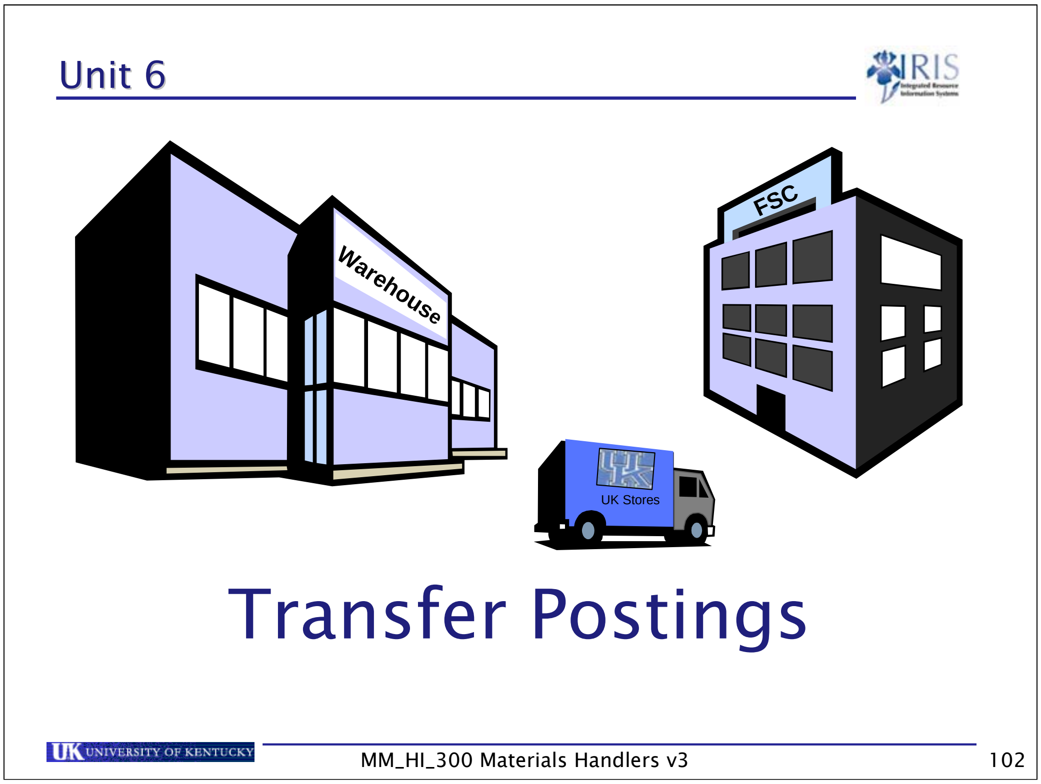
Summary

- You should now be able to:
  - Understand the concept of goods issues in SAP transaction codes
    - ZMM_GI_GR
  - Understand what reservations are and why they are used
  - Post goods issues using ZMM_GI_GR for:
    - Cost centers
    - Reservations
    - WBS Elements
    - To scrap



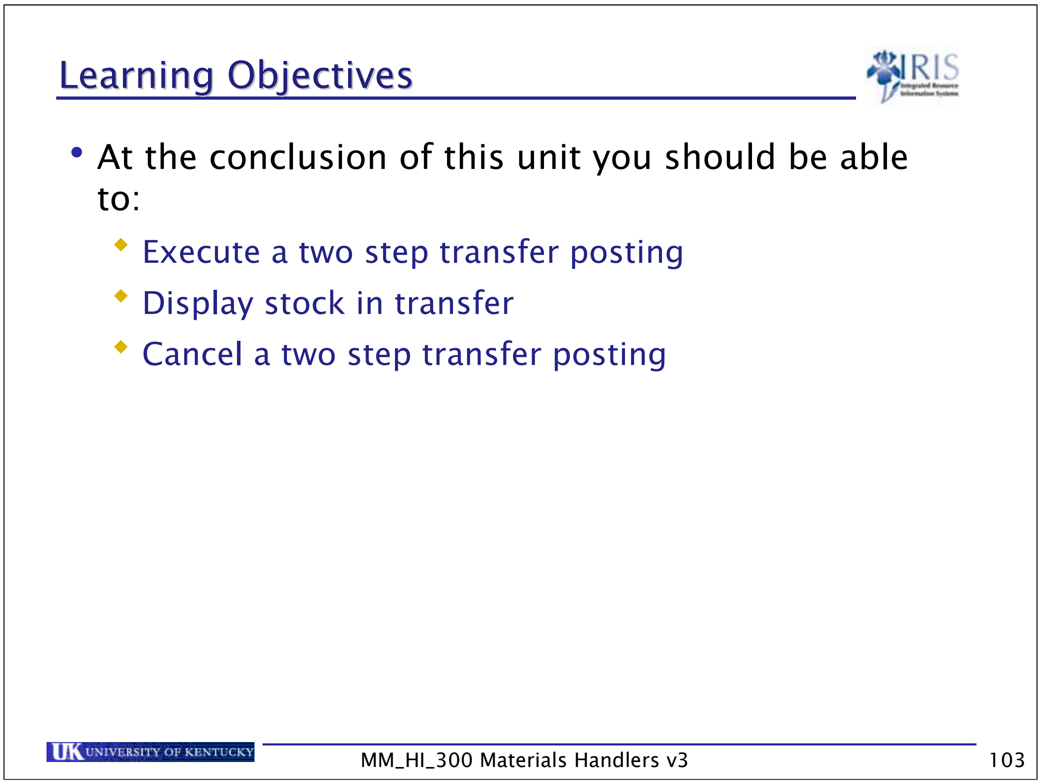
Summary cont’d

- You should now be able to:
  - Use custom transactions to mass process reservations:
    - ZMM_PICKT
    - MB26
    - ZMM_SHORT
  - Cancel / Reverse Goods Issues
  - Print goods issues material documents



Unit 6

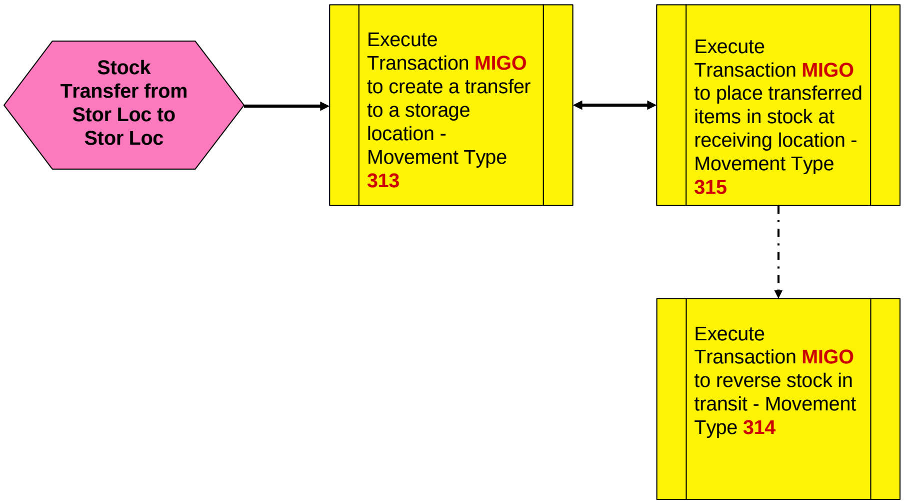
Transfer Postings



Learning Objectives

- At the conclusion of this unit you should be able to:
  - Execute a two step transfer posting
  - Display stock in transfer
  - Cancel a two step transfer posting

Stock Transfers – 2 Step



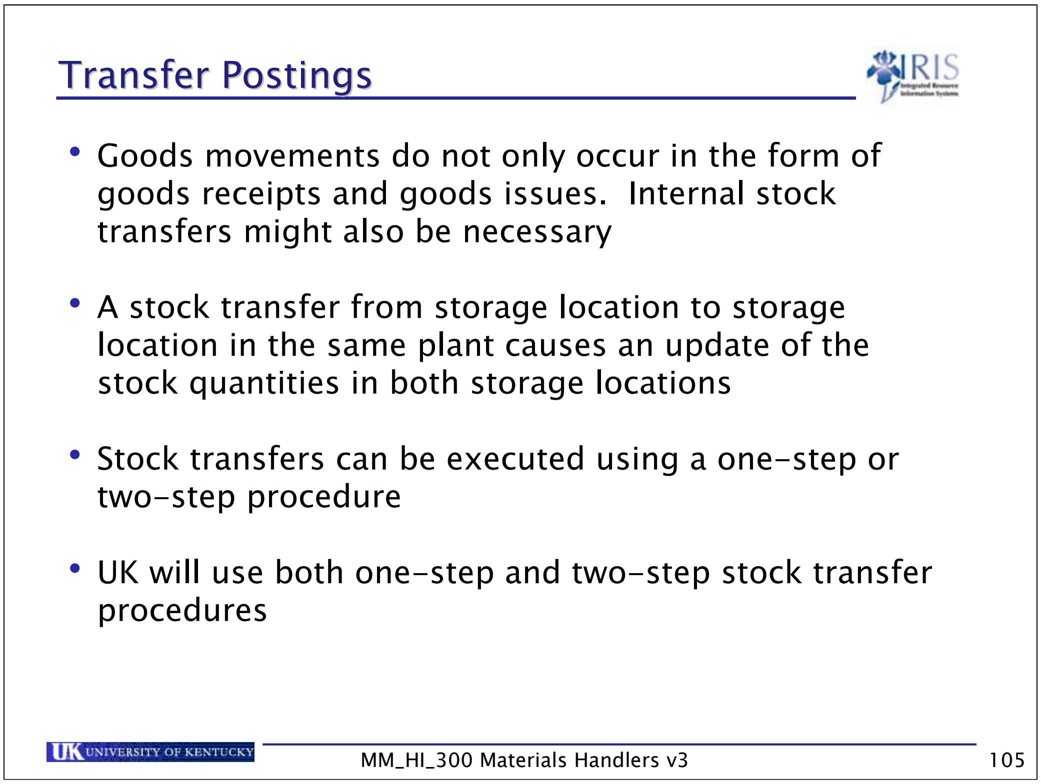
Stock Transfer from Stor Loc to Stor Loc

Execute Transaction **MIGO** to create a transfer to a storage location - Movement Type **313**

Execute Transaction **MIGO** to place transferred items in stock at receiving location - Movement Type **315**

Execute Transaction **MIGO** to reverse stock in transit - Movement Type **314**

R3P-MM-ISSUER

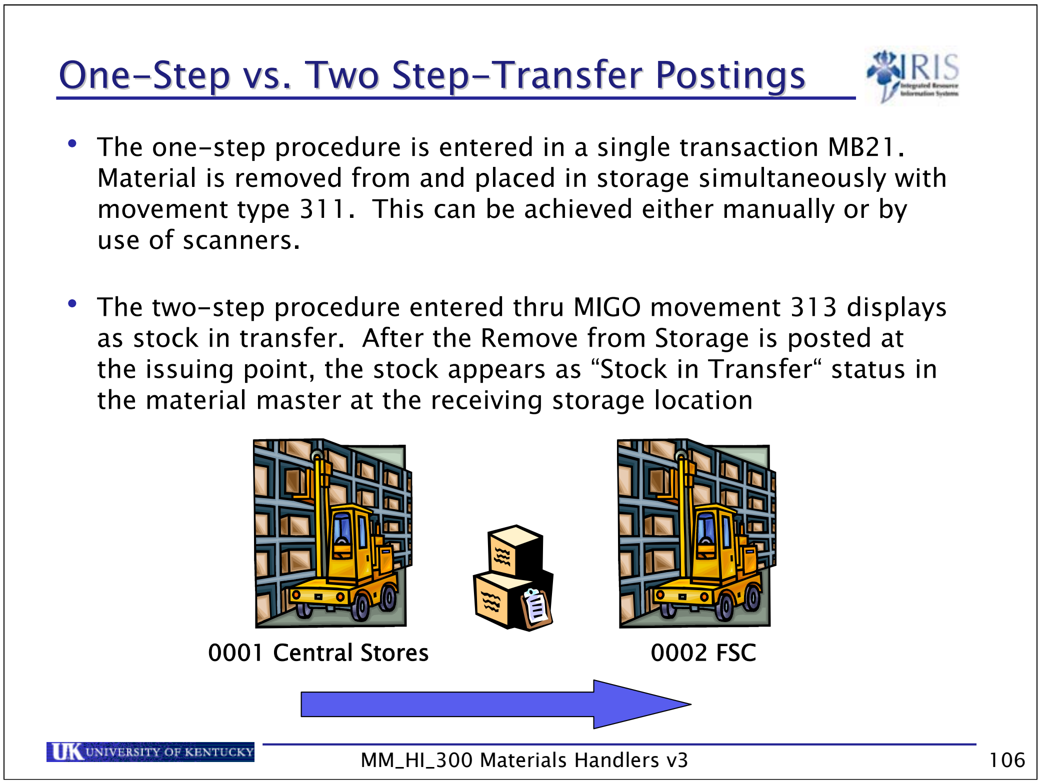


Transfer Postings

- Goods movements do not only occur in the form of goods receipts and goods issues. Internal stock transfers might also be necessary
- A stock transfer from storage location to storage location in the same plant causes an update of the stock quantities in both storage locations
- Stock transfers can be executed using a one-step or two-step procedure
- UK will use both one-step and two-step stock transfer procedures

Scenario:

A storage location requires replenishment of certain materials outside of the standard MRP replenishment process



One-Step vs. Two Step-Transfer Postings

- The one-step procedure is entered in a single transaction MB21. Material is removed from and placed in storage simultaneously with movement type 311. This can be achieved either manually or by use of scanners.
- The two-step procedure entered thru MIGO movement 313 displays as stock in transfer. After the Remove from Storage is posted at the issuing point, the stock appears as “Stock in Transfer“ status in the material master at the receiving storage location

0001 Central Stores

0002 FSC

UK UNIVERSITY OF KENTUCKY

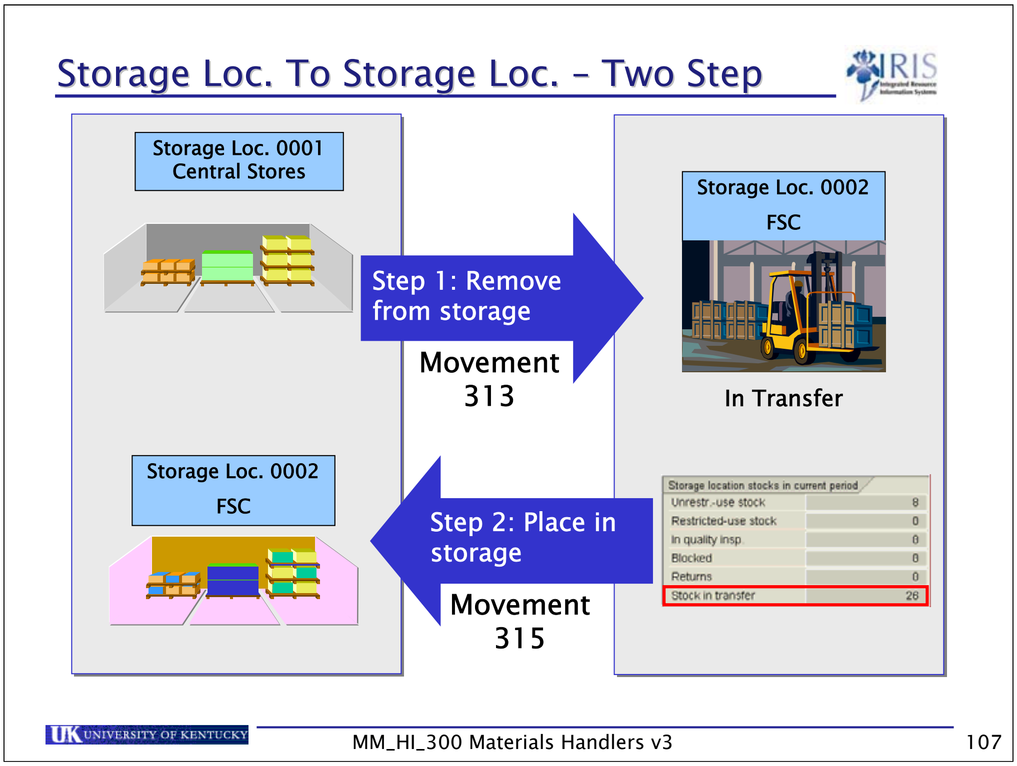
MM_HI_300 Materials Handlers v3

106

UK will use a two step procedure. The goods issue and goods receipt is entered in separate steps. Since the postings are separate, two material documents are created – one for each movement type.

The two step procedure has the advantage of being able to monitor stocks that are “in transfer” from one storage location to another.

The two step procedure is typically used when locations are not physically close together or the transfer time is not immediate.



Storage Loc. To Storage Loc. – Two Step

Storage Loc. 0001
Central Stores

Step 1: Remove from storage

Movement 313

Storage Loc. 0002
FSC

In Transfer

Storage Loc. 0002
FSC

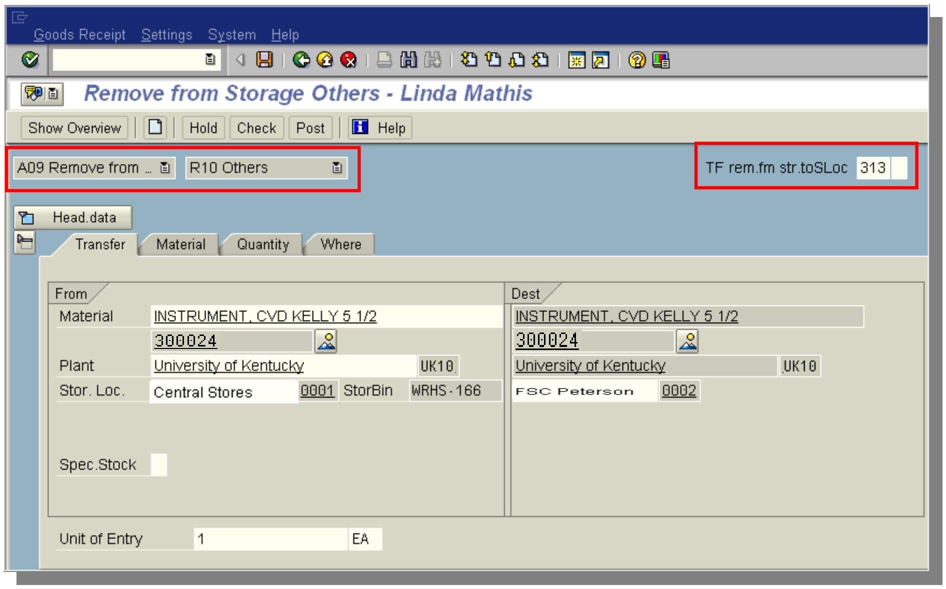
Step 2: Place in storage

Movement 315

Storage location stocks in current period	
Unrestr.-use stock	8
Restricted-use stock	0
In quality insp.	0
Blocked	0
Returns	0
Stock in transfer	26

- Storage location 0001 = Warehouse
- Storage location 0002 = S&D
- Storage location 0003 = OR
- Storage location 0004 = CAS

Step 1: Remove From Storage (313)



Remove from Storage Others - Linda Mathis

A09 Remove from ...
R10 Others
TF rem.fm str.toSLoc 313

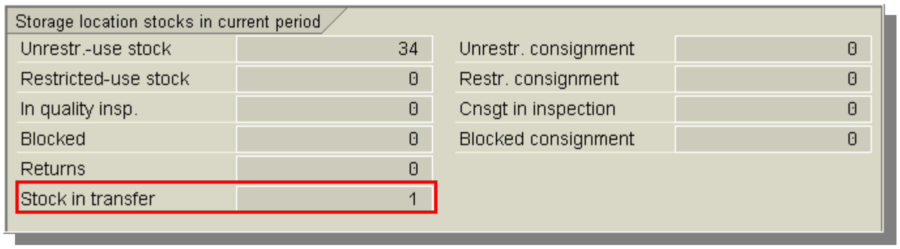
	From		Dest	
Material	INSTRUMENT, CVD KELLY 5 1/2		INSTRUMENT, CVD KELLY 5 1/2	
	300024		300024	
Plant	University of Kentucky	UK10	University of Kentucky	UK10
Stor. Loc.	Central Stores	0001 StorBin WRHS-166	FSC Peterson	0002
Spec.Stock				

Unit of Entry 1 EA

This is an example of MIGO variant for stock transfer remove from storage.

Stock in Transfer

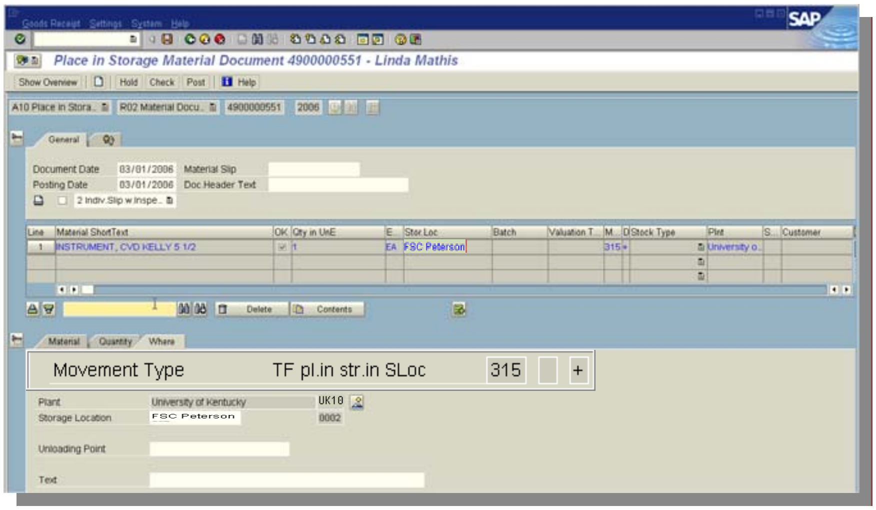
Stock in Transfer is displayed in the Material Master – Storage Location Stock view



Storage location stocks in current period

Unrestr.-use stock	34	Unrestr. consignment	0
Restricted-use stock	0	Restr. consignment	0
In quality insp.	0	Cnsgt in inspection	0
Blocked	0	Blocked consignment	0
Returns	0		
Stock in transfer	1		

Step 2: Place in Storage (315)



Place in Storage Material Document 4900000551 - Linda Mathis

A10 Place in Stora.. | R02 Material Docu.. | 4900000551 | 2006

Document Date 03/01/2006 Material Slip
Posting Date 03/01/2006 Doc.Header Text
☐ 2 Indiv.Slip w.Inspe..

Line	Material ShortText	OK	Qty in UnE	E..	Stor.Loc	Batch	Valuation T...	M...	D	Stock Type	Plnt	S...	Customer
1	INSTRUMENT, CVD KELLY 5 1/2	☑	1	EA	FSC Peterson			315	+		University o..		

Movement Type TF pl.in str.in SLoc 315 +

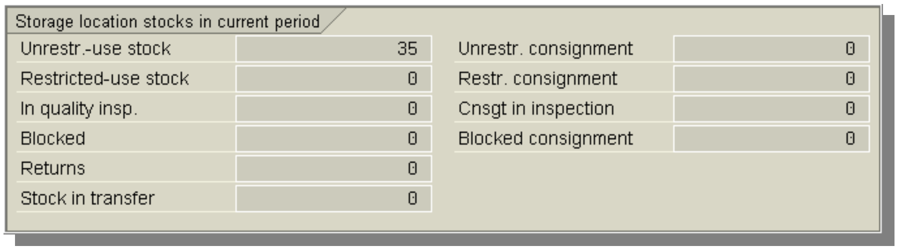
Plant University of Kentucky UK10
Storage Location FSC Peterson 0002
Unloading Point
Text

Select transaction (a10) Place in storage and enter the document number created when you removed stock from storage. The document number will be delivered with the material.

Select the OK flag to accept the transfer.

Movement type 315 is used

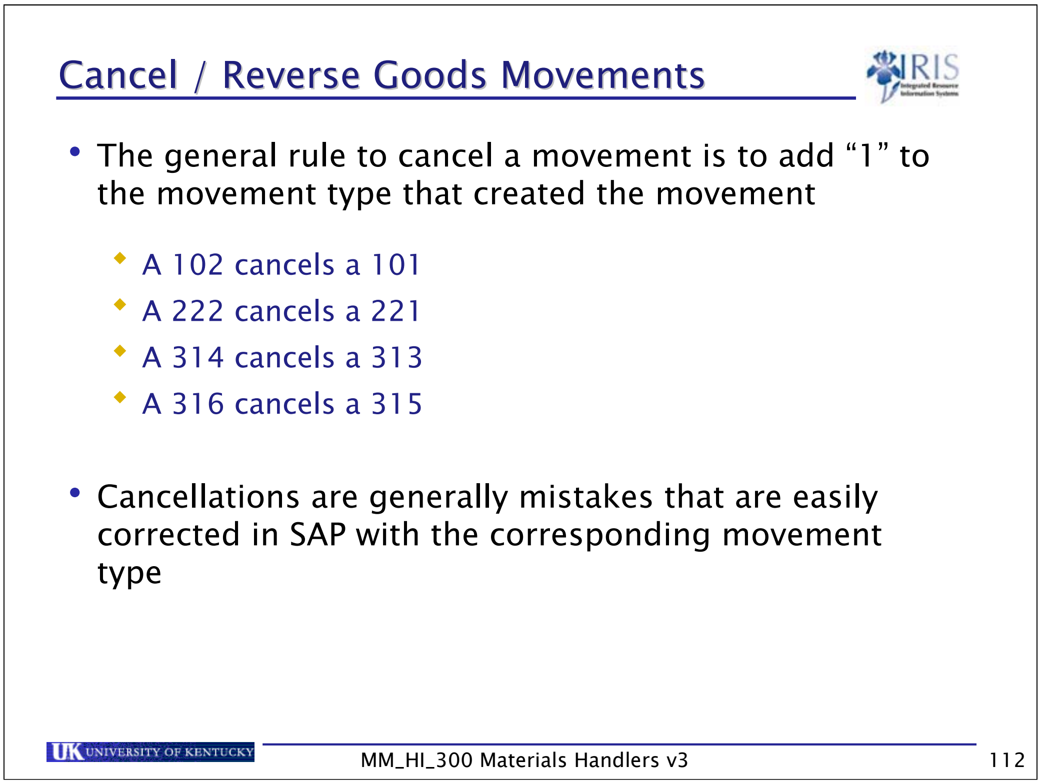
Display Storage Location Stock



Storage location stocks in current period

Unrestr.-use stock	35	Unrestr. consignment	0
Restricted-use stock	0	Restr. consignment	0
In quality insp.	0	Cnsgt in inspection	0
Blocked	0	Blocked consignment	0
Returns	0		
Stock in transfer	0		

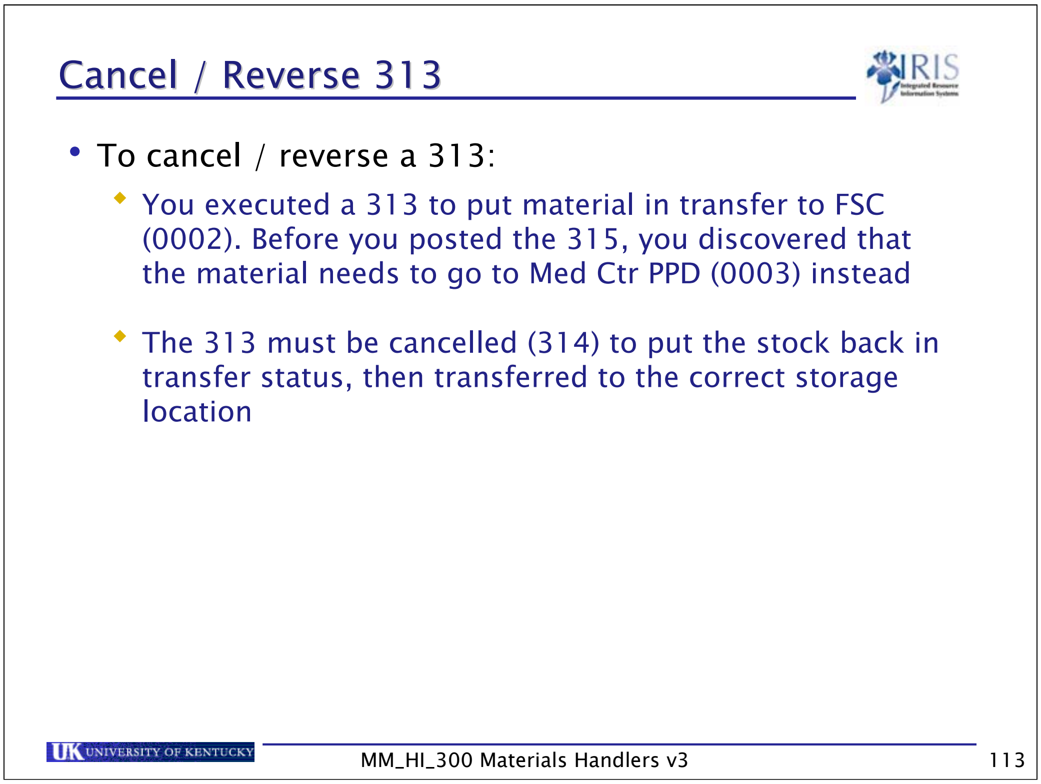
Stock in Transfer is cleared and added to Unrestricted stock



Cancel / Reverse Goods Movements

- The general rule to cancel a movement is to add “1” to the movement type that created the movement
  - A 102 cancels a 101
  - A 222 cancels a 221
  - A 314 cancels a 313
  - A 316 cancels a 315

- Cancellations are generally mistakes that are easily corrected in SAP with the corresponding movement type



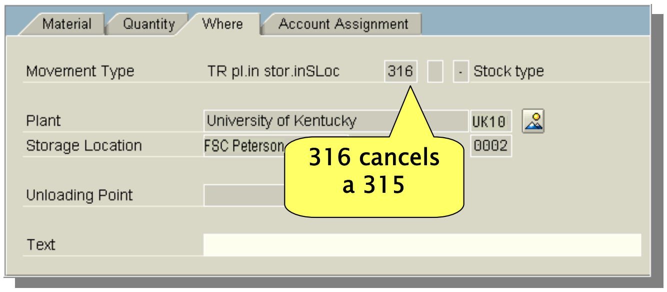
Cancel / Reverse 313

- To cancel / reverse a 313:
  - You executed a 313 to put material in transfer to FSC (0002). Before you posted the 315, you discovered that the material needs to go to Med Ctr PPD (0003) instead
  - The 313 must be cancelled (314) to put the stock back in transfer status, then transferred to the correct storage location

Cancel/Reverse a Two-Step Transfer Posting

- To cancel the entire two-step transfer posting (313 and 315) you must cancel the 315 material document first ***then*** cancel the 313 material document
- For example:
  - You executed a 313 to put material in transfer to FSC (0002). Then you posted the 315.
  - You discovered that the material needs to go to Med Ctr PPD (0003) instead
  - The 315 movement must be cancelled first with (316)
  - Then 313 movement can be cancelled with a with (314)
  - The material can then be transferred to the correct storage location

Cancel/Reverse: Process



Movement Type: TR pl.in stor.inSLoc 316 - Stock type

Plant: University of Kentucky UK10

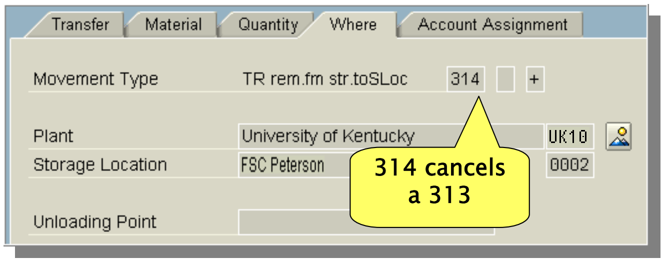
Storage Location: FSC Peterson 0002

Unloading Point

Text

316 cancels a 315

- 1st: Cancel the 315 material document



Movement Type: TR rem.fm str.toSLoc 314 +

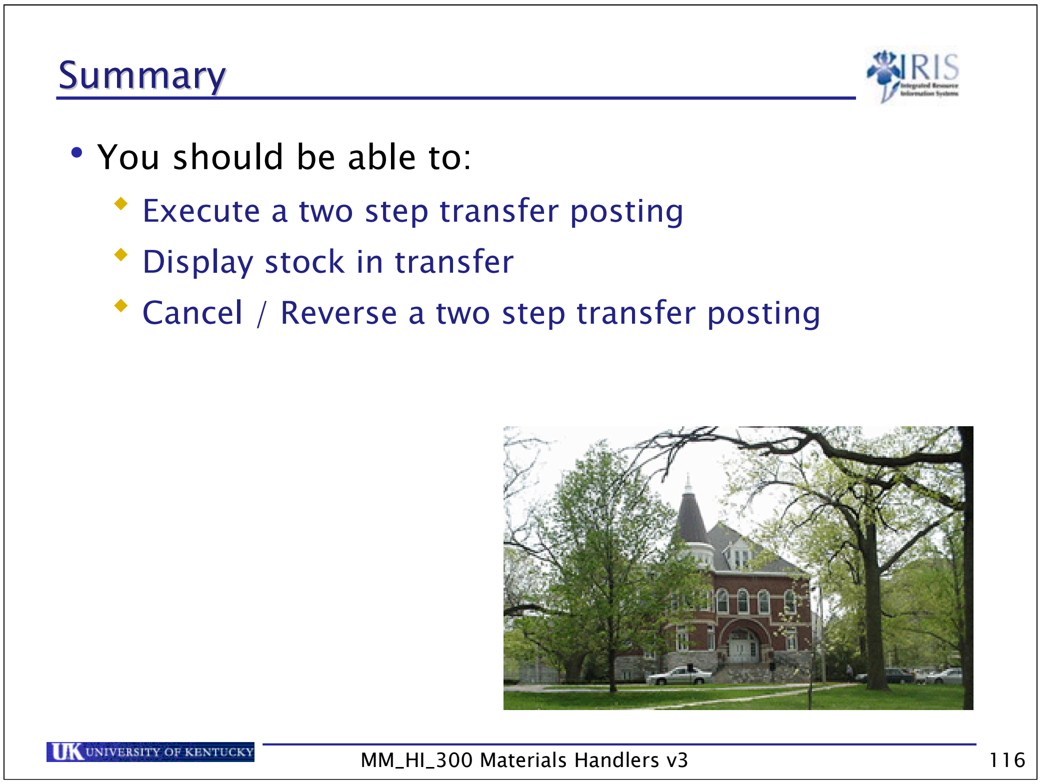
Plant: University of Kentucky UK10

Storage Location: FSC Peterson 0002

Unloading Point

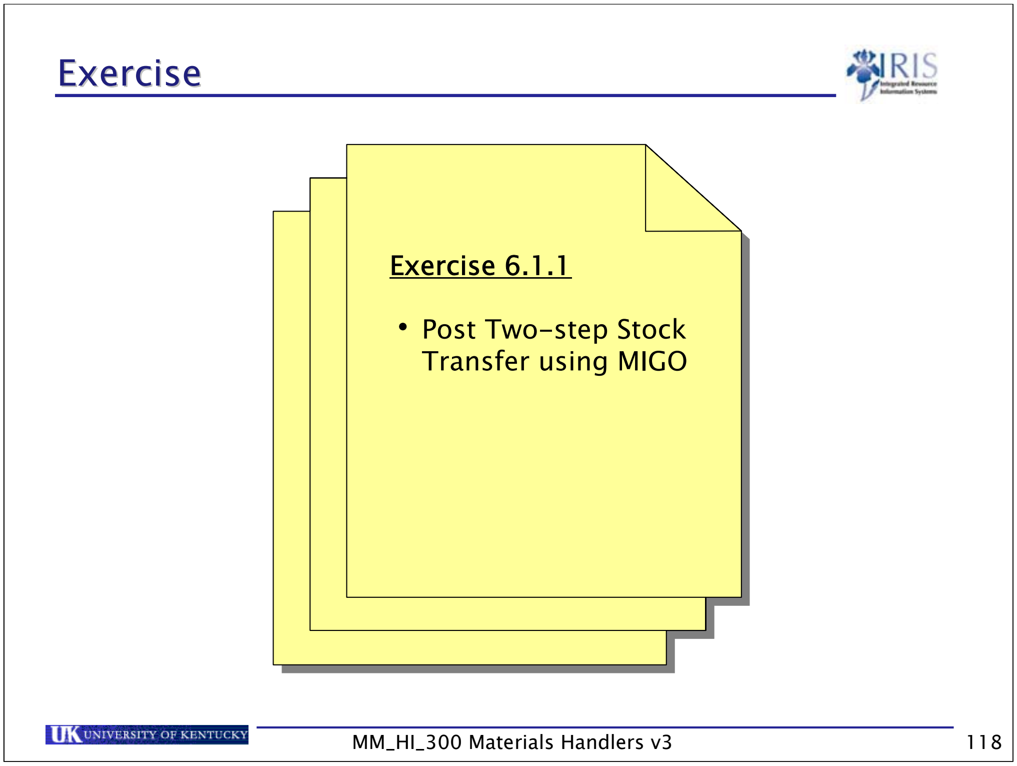
314 cancels a 313

- 2nd: Cancel the 313 material document



Summary

- You should be able to:
  - Execute a two step transfer posting
  - Display stock in transfer
  - Cancel / Reverse a two step transfer posting



Exercise

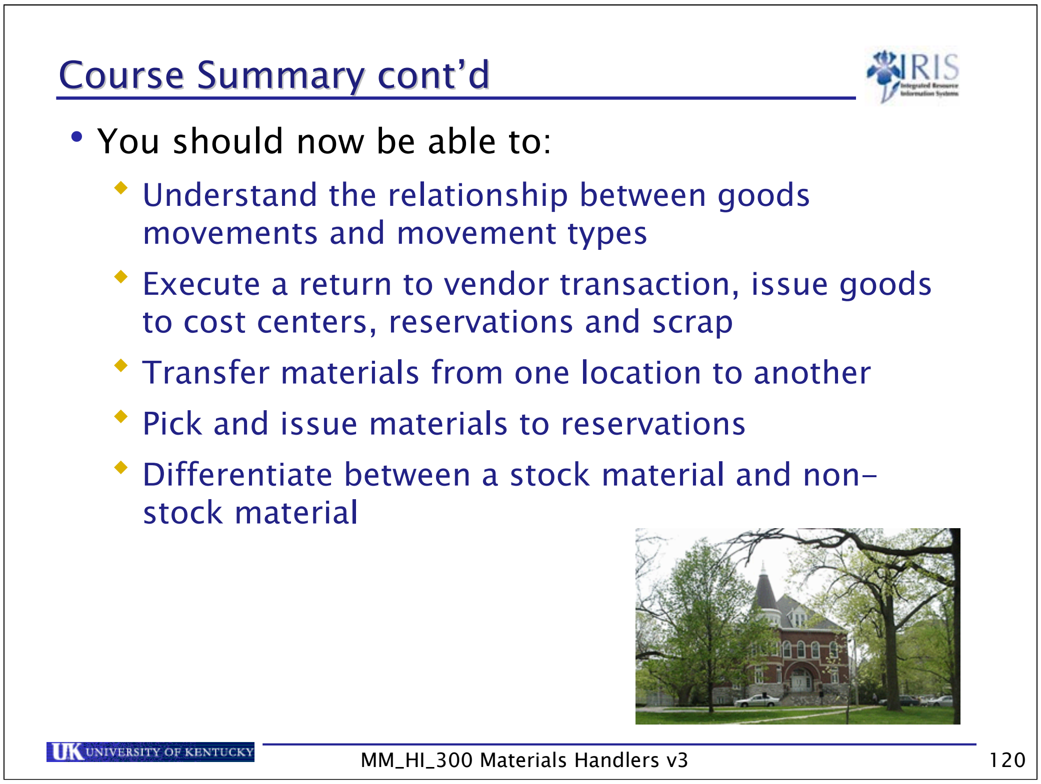
Exercise 6.1.1

- Post Two-step Stock Transfer using MIGO

Read Slide

Course Summary

- You should be able to:
  - Understand the relationship between the organizational structure and master data
  - Understand the ZMM_GI_GR transaction code
  - Use the ZMM_GI_GR and MIGO transaction to execute various goods movements in SAP
  - Create a personal favorites list of frequently used movement types
  - Execute goods movements in SAP
  - Cancel/ reverse goods movemen



Course Summary cont'd

- You should now be able to:
  - Understand the relationship between goods movements and movement types
  - Execute a return to vendor transaction, issue goods to cost centers, reservations and scrap
  - Transfer materials from one location to another
  - Pick and issue materials to reservations
  - Differentiate between a stock material and non-stock material