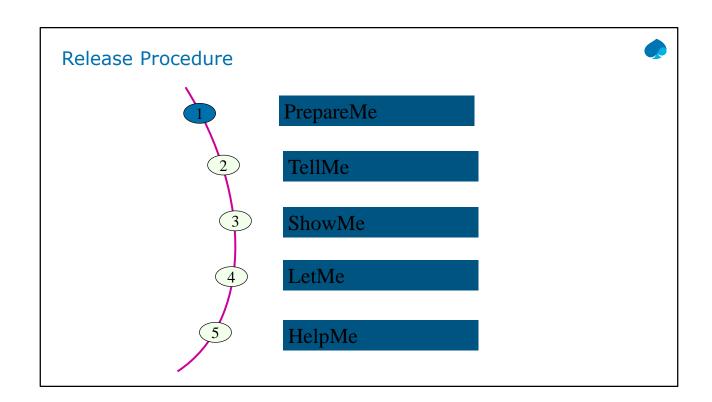
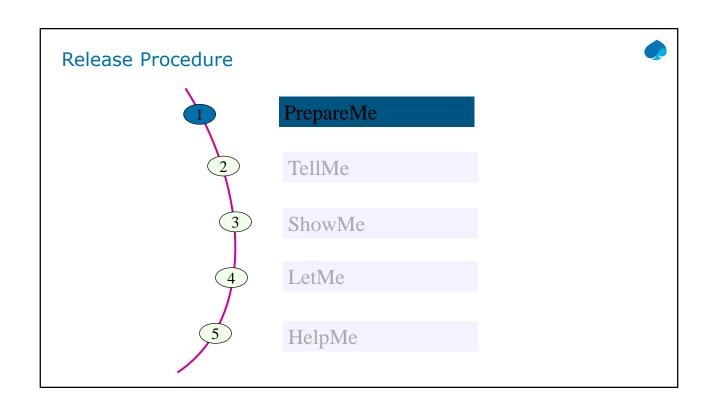


This In-house course was developed to meet the needs of SAP R/3 Consultants working at Capgemini. This course is designed to present a high level view of MM Release Procedure and to provide the Consultants with basic information about how to use this Functionality.

More in-depth courses have been developed to train Consultants in specific areas discussed during this course.

Your comments at the conclusion of this training session are appreciated and will help us better tailor future courses to meet your training needs.





Course Objective

- > Become familiar with electronic (SAP) document release procedure for purchase orders, outline purchase agreements, and requests for quotation
- > Describe the function of and steps in a release procedure.
- > Release requisitions and purchase orders
- > Set up your own release procedures in Customizing
- ➤ Case Study & Exercise.
- ➤Tips & Tricks
- > Test Your Knowledge & Answers

Purpose



Release procedure / Approval process is critical for any business to maintain control / monitor procurement process $\,$



Release procedure also describe various level of authority in an organization

It also indicate power of delegation among organization

It's a communication procedure



Use



By using this component you can set up an approval procedure

In this procedure you can set up various stage of approval based on organization procedure $% \left(1\right) =\left(1\right) \left(1$

Release procedure can be use to Monitor / Control various procurement processes

Setting up approval process we can effectively use budget allocation

You use this component if you wish to set up approval procedures for purchase requisitions or other purchasing documents. Under such a procedure, if a purchase requisition or external purchasing document fulfills certain conditions, it has to be approved before it can be processed further.

Challenges



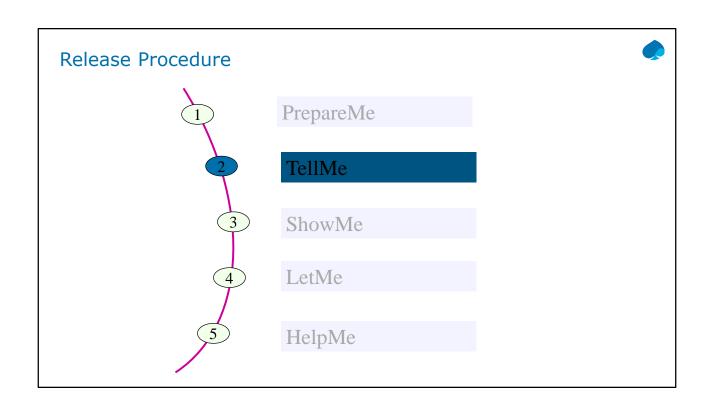
Large business houses need specialized approval procedure to control over various procurement processes of business. Different operative divisions within an Organization operate in different environments and hence develop their own specialized approval procedure.



It is a challenge to create a different level of release step that will cater to the needs of individual operative divisions yet integrate the effort to meet the approval process of the Organization as a whole

In any business it becomes increasingly difficult to ensure proper control, proper exchange of information, ability to react quickly and maintain delegation of power within organization if the organization structure is too complex or too layered

In business it too difficult while approval process various from document, type of procurement and nature of procurement $\,$







- Release procedure can be set for internal and external document based on organizational requirement
- Internal Document Purchase Requisition Service Entry Sheet
- External Document
 Purchase Order
 Contract / Scheduling Agreement
 Request for Quotation

Purchase Requisition (PR)



- Purchase Requisition (PR) is internal document use to initiate procurement action
- •You use this component if you wish to give notification of requirements of materials and/or external services and keep track of such requirements
- Two kind of release procedure available for PR
 Without Classification
 With Classification
- PR can be release at item level as well header level
- PR release can be differentiate between Manual created as well created through MRP

Service Entry Sheet



- This instrument is an internal document
- •The services actually performed (work actually done) by a service provider are recorded in a Service Entry Sheet with reference to the purchase order
- •You can enter both planned and unplanned services: Planned services

Can be adopted directly in the service entry sheet $\mbox{\sc Unplanned services}$

Are not precisely described, quantified, or priced until the work actually done is entered. The system checks whether unplanned services are within the limit set in the purchase order.

• Service Entry Sheet can be release at header level with classification release procedure only







- For External Document only with classification release procedure is available.
- External Document release is possible at only Header Level.
- Main difference between internal and external release procedure is you may create intermediate document (RFQ) if internal document is not released completely.
- •Out put of external document possible once it release completely.
- Eight Level of release is possible for External document in SAP.

Release Component - Characteristics



- Classification characteristics are the criteria for a <u>release</u> <u>condition</u>. If the criteria of a release condition are satisfied, the associated release strategy is assigned to the purchasing document.
- In communication structure CEKKO you will find all the fields that can be used as characteristics for a release condition



Release Component - Class



- You use a class to group together characteristics that are to constitute a release condition for a release strategy. In the step " Define Release Procedure for Purchase Orders" you assign this class to the release strategy.
- The Classification System uses characteristics to: find suitable objects, find similar objects, or find if no suitable objects exist
- A carefully constructed classification structure makes it easier & quicker to find objects within a Classification System
- For Release 032 is class type provided by SAP
- We need to assign various characteristics to class





Release Component – Release Group Release Code



- Release group is used to set the various release procedure and assignment of class with release procedure
- •The release code is a two-character ID allowing a person to release (clear, or approve) a requisition or an external purchasing document. Who may work with which release codes is basically controlled via a system of authorizations (authorization object M_EINK_FRG)
- Assignment of release code to individual processor (processing staff member) is defined according to organizational requirements



Release Component – Release Indicator

- When a document has been processed via a release code, a release indicator is assigned to it
- •Release Indicator Determine For Purchase Requisition:

Whether the item may be changed by Purchasing or Materials Planning and Control after the start of the release procedure

Whether a new strategy is determined and whether existing releases must be cancelled in the event of changes

Whether an RFQ or a PO may be created with reference to the item



Release Component – Release Indicator

•Release Indicator Determine:

For External Purchasing Document:

Whether the document may be changed by Purchasing after the start of the release procedure

Whether a new strategy is determined and whether existing releases must be cancelled in the event of changes

Whether the purchasing document is released for transmission



Release Component – Release Strategy

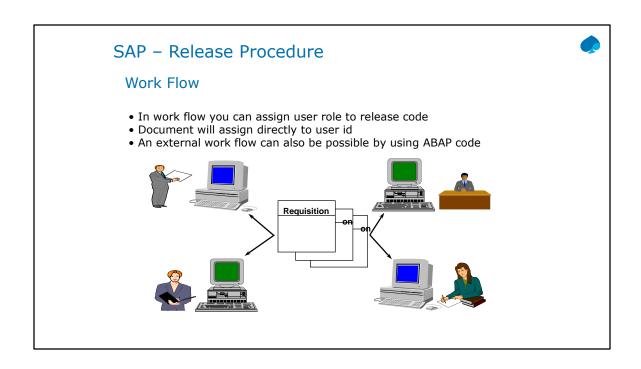
- •The release strategy defines the approval process for documents. The strategy specifies the release codes necessary and the sequence in which releases have to be effected. You can define a maximum of eight release codes
- To fulfill release Strategy we need to maintain:
 <u>Release Prerequisites</u>: The release prerequisites indicate the sequence in which a document must be approved via the release codes. The release prerequisites are defined in the Purchasing Customizing facility (in the release strategy)

The approval procedure for document in an enterprise may be set up in such a way that a **Level 1** must approve a document before the next level of authority



Alternate Release

- •Within the release sequence, you can define alternatives. This means that several level can effect release (signify approval) at a certain point in the sequence. If just one of these level has effected release, the next release status is reached. The other employees thus need take no action
- Example: Three release code are define for a document
 In pre requisite that has mentioned that to release at
 level 3 release of level 2 is not required
 Level 3 can release document without release of level 2





Work Flow

• Purpose

SAP Business Workflow is a solution which has been integrated fully in the R/3 System and which enables customer-specific business process flows to be coordinated and controlled on a cross-application and cross-work center basis. SAP Business Workflow therefore enhances "ready-made" application software. The SAP Business Workflow definition environment can represent business processes simply and can respond to changing external conditions quickly, even in a live system, by adapting the existing business processes.



Work Flow

•The workflow scenarios can be divided into three categories: Creating events

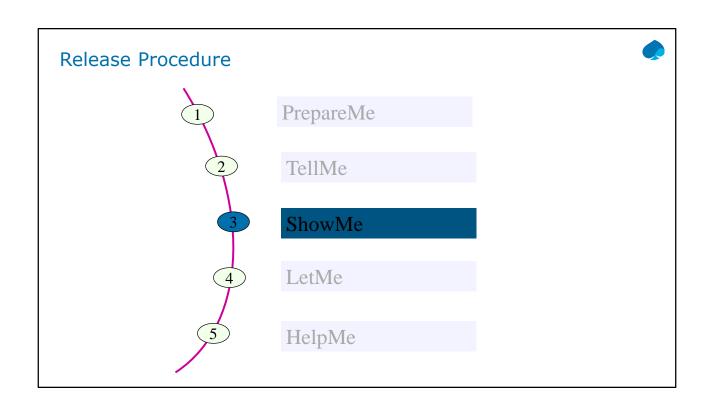
Events are created to report status changes for an application object and to allow a reaction to the changes.

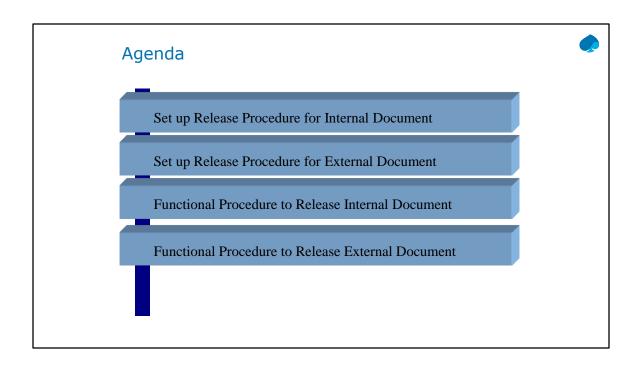
Providing SAP tasks

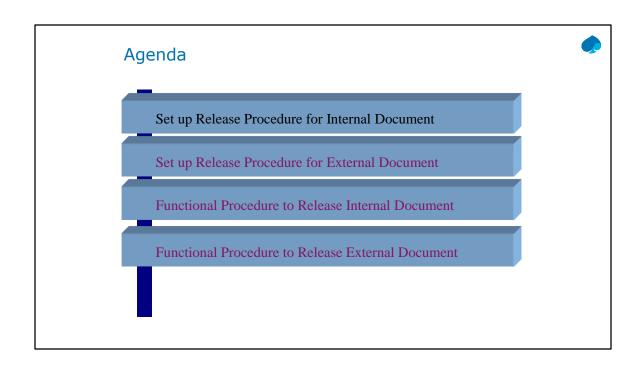
A task contains a task description and the connection to the application logic via the method for a business object. Before you can use a task productively, you must assign the tasks to its possible agents.

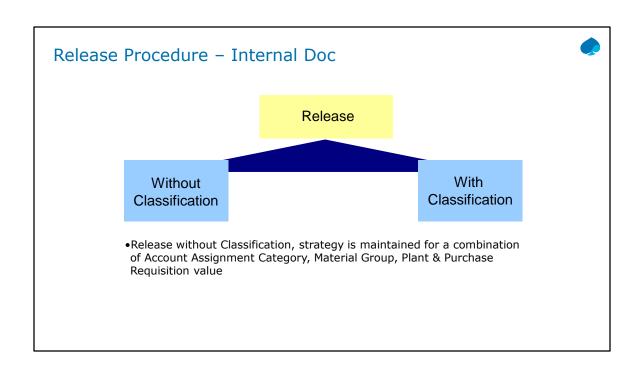
Providing SAP workflows

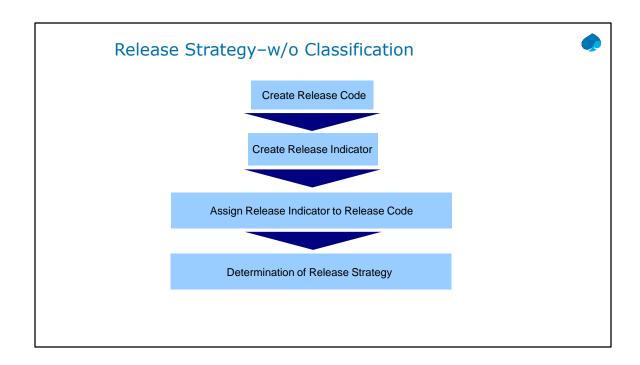
A workflow contains a complete workflow definition covering several steps. An SAP workflow has a complete workflow definition, but must still be adapted to the organizational environment of the customer.







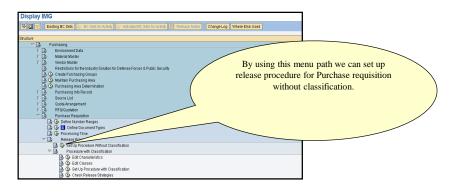




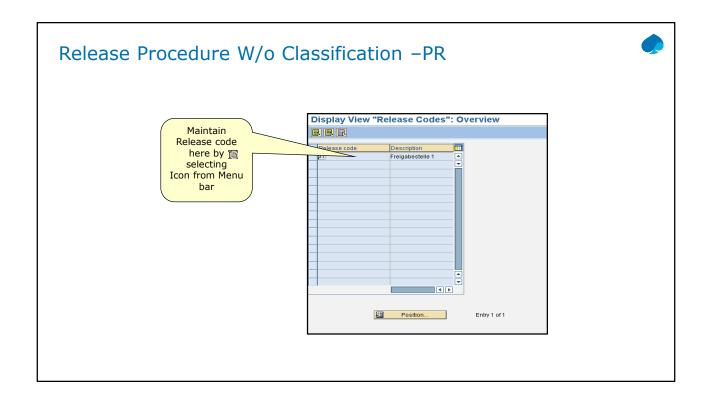




SPRO → Materials Management → Purchasing → Purchase Requisition → Release Procedure → Set up Procedure without classification

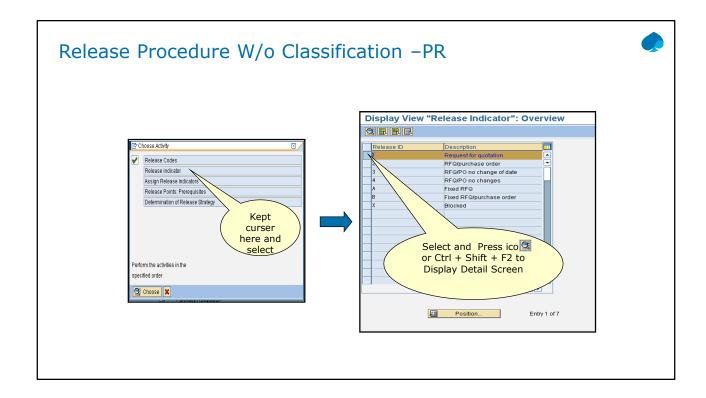


Without classification release procedure mainly used for small business units, where every procurement / process need to approved by a single authority. No distinguish between different type of procurement or value or source.



Based on release code document can be picked up for release, an approver will release the document by using release code.

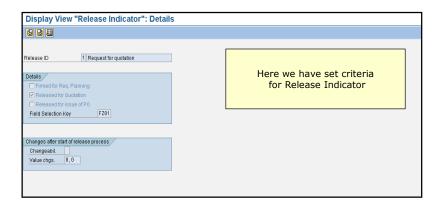
Authorization can also be maintained by using release code.



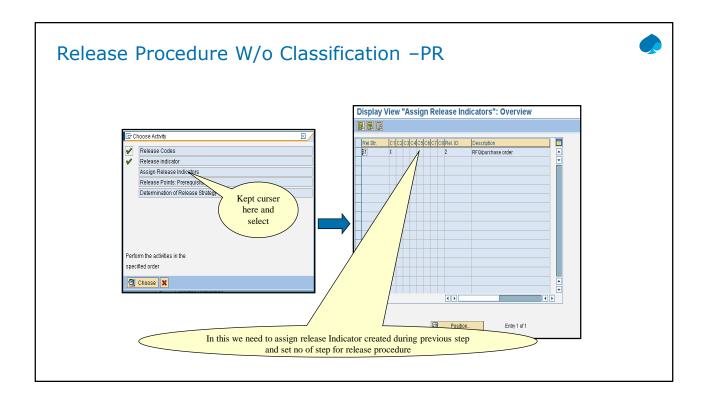
Release indicator is mainly used to indicate at what stage of release a document has been reached or which document we can create after a perticular stage of release.

Release Procedure W/o Classification -PR

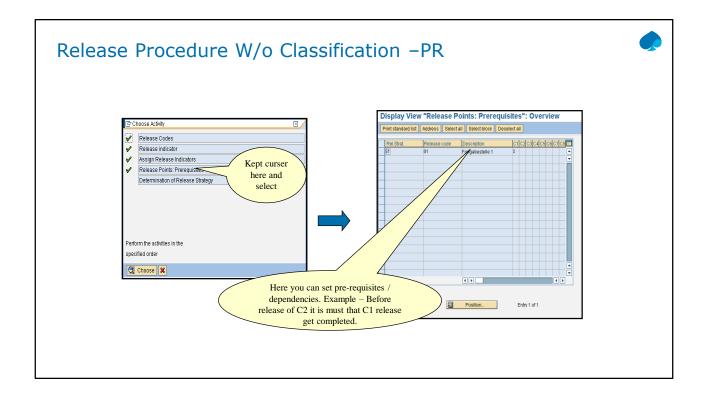




Here by using check box setting can be made for creation of subsequent document i.e. if release indicator 1 is set then PR has been release for creation of request for Quotation. This indication is made based on release procedure adopted by an organization.

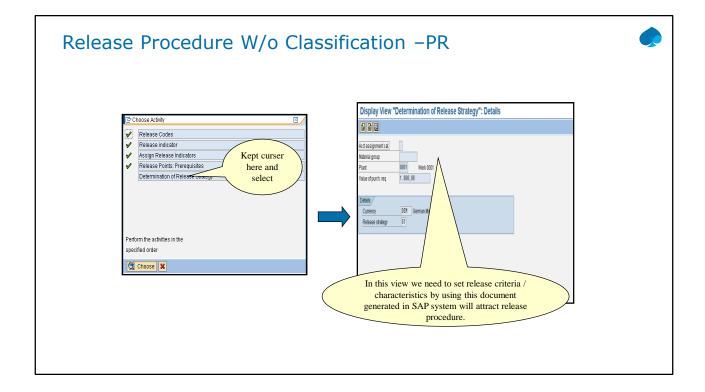


To call a release procedure while creating document assignment of release code and release indicator is required. Based on this assignment while a document get release through functional process.

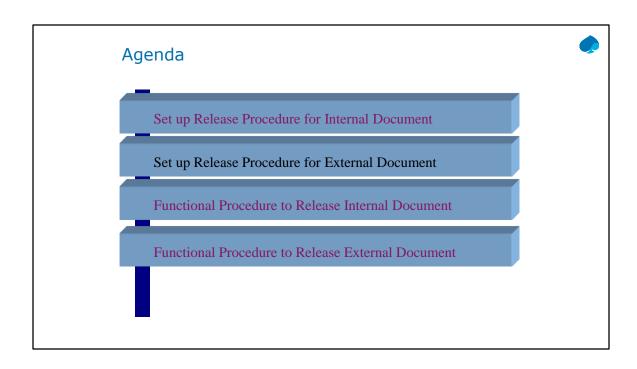


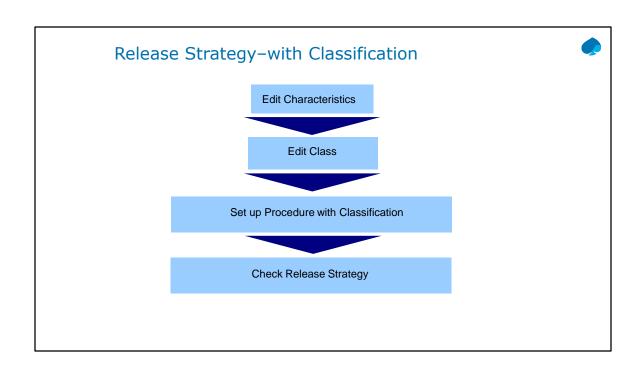
Release procedure is possible to having 8 step. This step can be define as per requirement of client.

Assignment of release code and release strategy



Here we can set release criteria on which a document can detected a release strategy. We have criteria available here by which we can set release strategy, i.e. Material group, Plant and Value. If we need more criteria or multiple values then we need to select release procedure with classification.

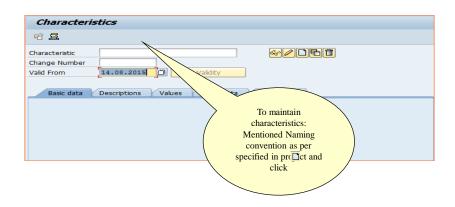






Release Procedure Classification – Intl / Ext Document

SPRO → Materials Management → Purchasing → Purchase Requisition → Release Procedure → Set up Procedure with classification → Edit Characteristics



Similar procedure need to follow for internal and external document, only communication structure are different. Char. Are the basic component for any release procedure. Communication structure used is CEBAN for PR and CEKPO for purchase order. In this communication structure value get stored.

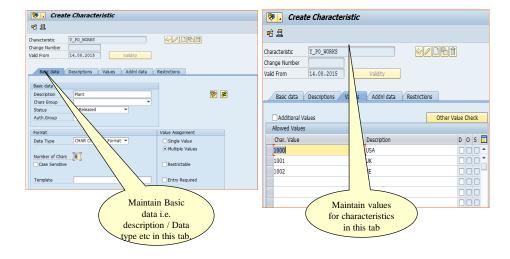
For Internal document - CEBAN

For External document - CEKPO

From communication structure we can select value for characteristics, say Plant, Net value, Purchasing group etc.







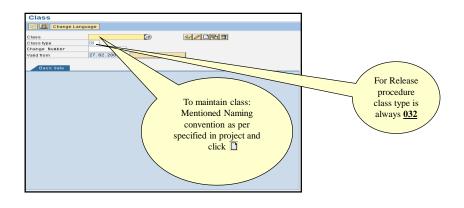
In Basic data we can set data type and number in characteristics and with selection. We can set multiple and single selection of characteristics value during firming of release strategy which will see in subsequent slides.

In value tab we can assign value to characteristics which can populate while creating release procedure.

Release Procedure Classification – Intl / Ext Document



SPRO \rightarrow Materials Management \rightarrow Purchasing \rightarrow Purchase Requisition \rightarrow Release Procedure \rightarrow Set up Procedure with classification \rightarrow Edit Class

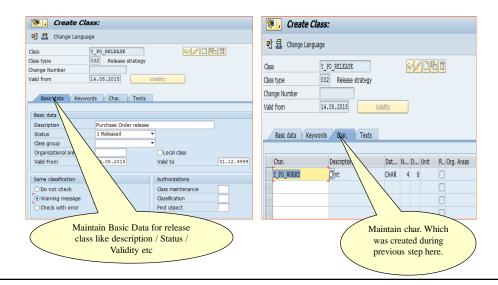


To maintain class for release of internal and external document need to follow same procedure.

We can use one class for internal and external document.





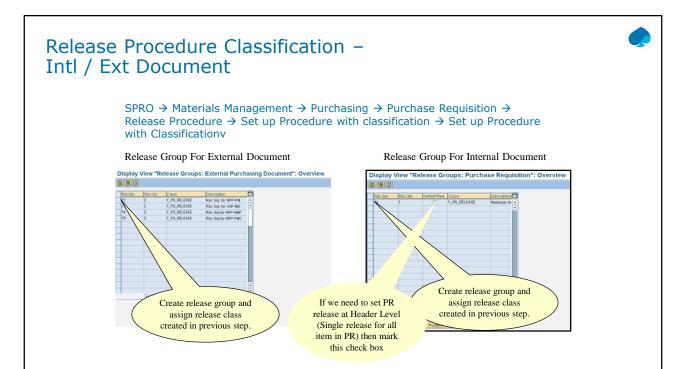


We have different char which we normally define to use during release procedure, a class is higher level component which can bundle together all char.

Two important tab 1. Basic Data 2. Char.

In Basic data we need to maintain description, status of class, normally we are maintaining with status released. We can also maintain validity of release class.

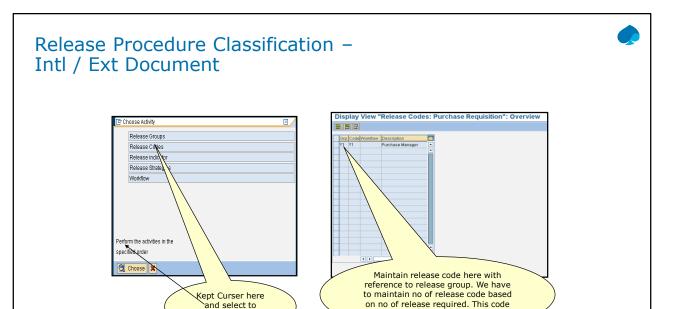
In Char tab we can assign characteristics for the class. This value get populated while defining release stretegy.



Difference between External and Internal document is Setting up release procedure at item and header level.

For internal document (PR) you can set release procedure on item level as well on header level by using "Over all P.Req" check box.

While configuring release group here we need to assign release class to release group.



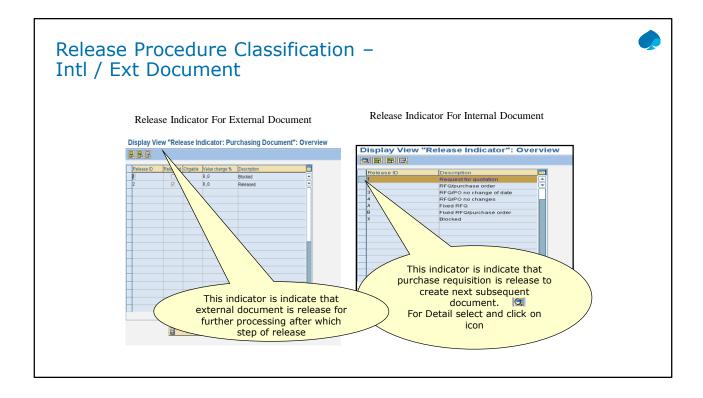
assign to user authorization profile.

Need to follow same procedure for Internal and external document while setting up release codes for release procedure. Release code is assign to release group, we may have no of release code based on how many step release procedure we are going to define.

This release code are assign to user authorization profile based on which release can be activated.

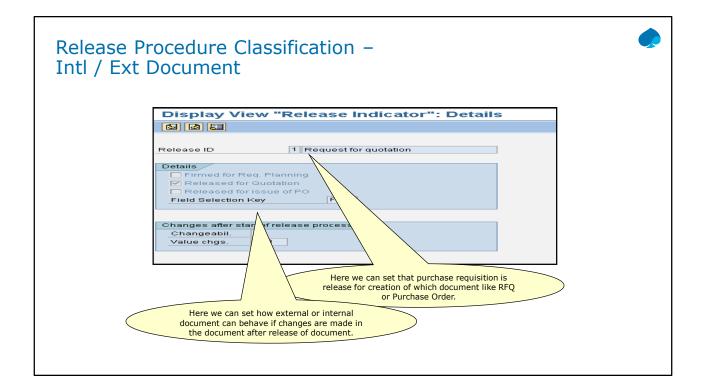
maintain Release

codes.



For external document only two release stage are possible either Blocked or released. Internal document release can be set for intermediate processing also.

For internal document you can have multiple release indicator. You can define release based on next document i.e. while following release procedure you can also set document release to create RFQ instead it is not release completely.



We have option available following option are available.

Changeable, new release in case of new strategy

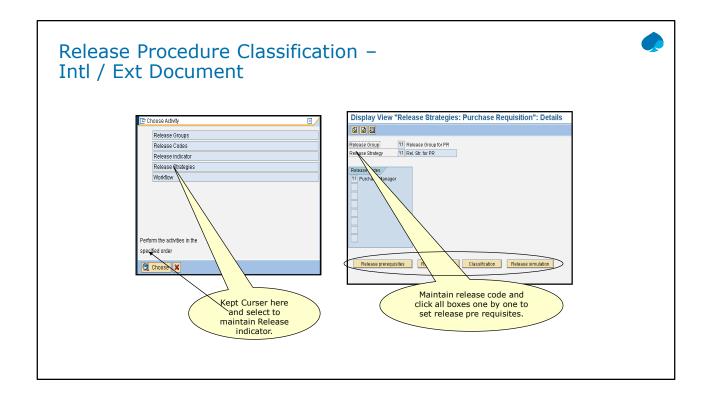
Cannot be changed

Changeable, no new determination of strategy

Changeable, new release in case of new strategy

Changeable, new release in case of new strat. or val. change

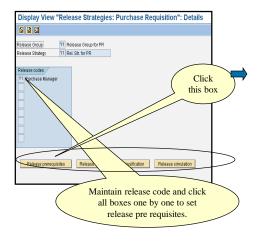
Wed can also set a value here after affecting release we external or internal document change by set value, release get cancelled



Based on release code we define earlier, release strategy can be define. For each release code a separate release procedure can be define.





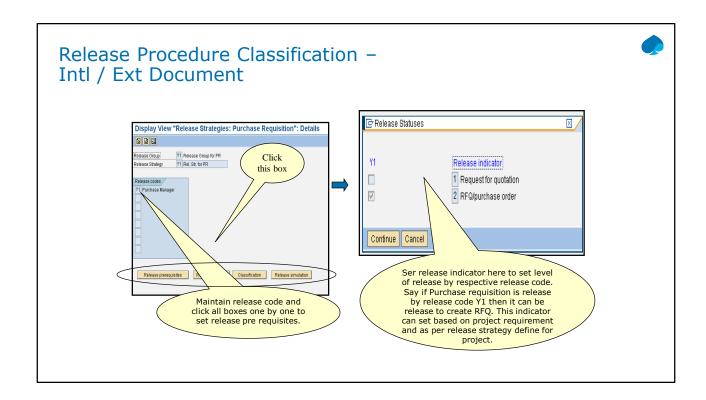




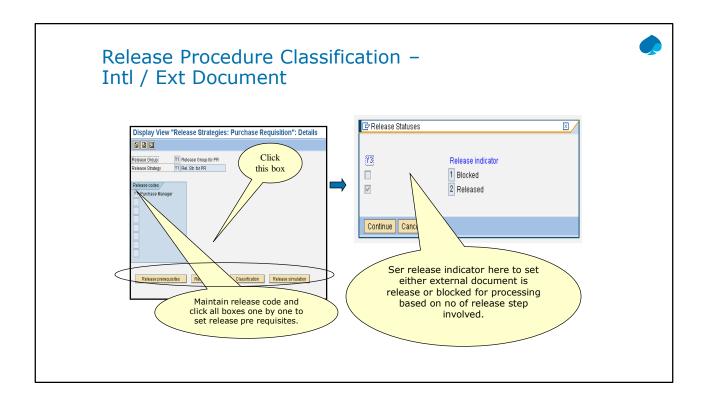
Release pre requisite indicate weather lower level of release need to set before setting next level of release or you can release without setting up of lower level of release (release by pass).

Also bypass of release is possible, for which necessary change we need to carry out in customizing of release pre requisite.

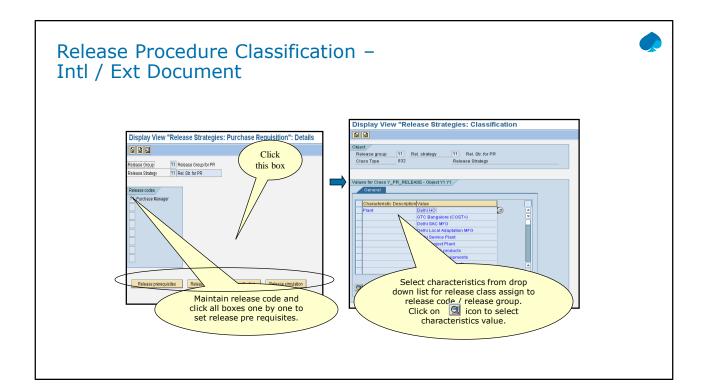
We can also explain in brief why alternate release procedure or release by pass required here.



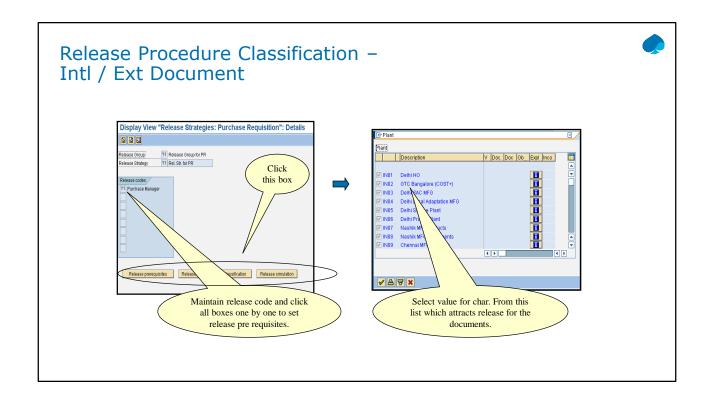
This slides indicate if document is released by Y1 then it can be release for RFQ/Purchase requisition.



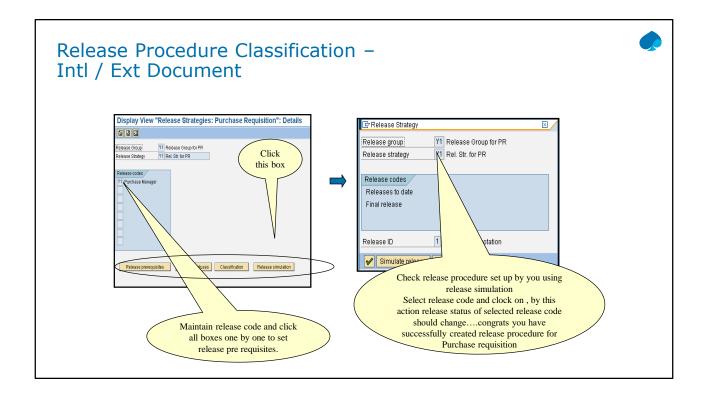
This indicate until document release by Y3 status of the document is blocked.



These are the values which we have assign while creating characteristics, we need to select value based on requirement for which need to set up a release procedure. We can select multiple value or single value based on selection done while configuring characteristics.

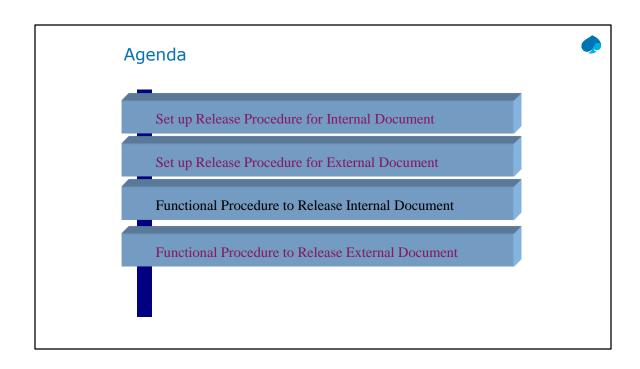


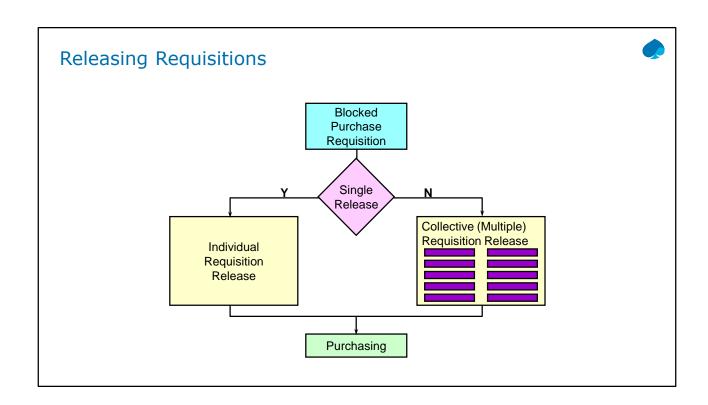
Here assignment take place, value can be select based on which release procedure get activated while creating document.



This is simulator, after configuring release procedure it need to check weather all release code working with all dependency.

This is just like a posting of an accounting document. We need to check that balance should be zero similarly we need to check that release procedure configure are working as per criteria or not.

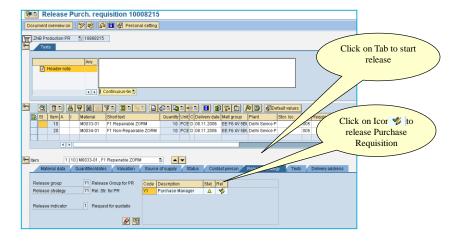


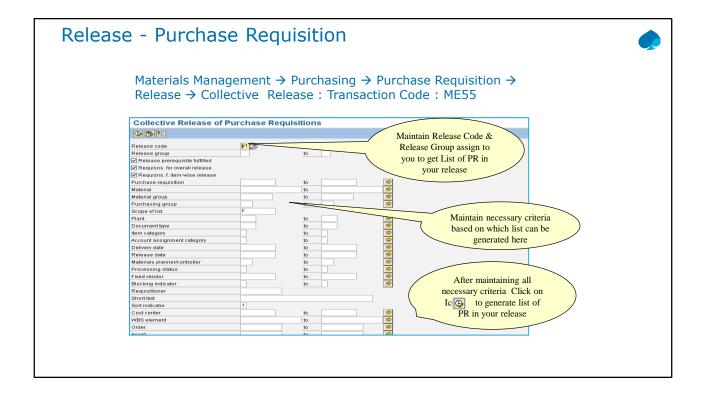


Release - Purchase Requisition



Materials Management → Purchasing → Purchase Requisition → Release → Individual Release : Transaction Code : ME54N

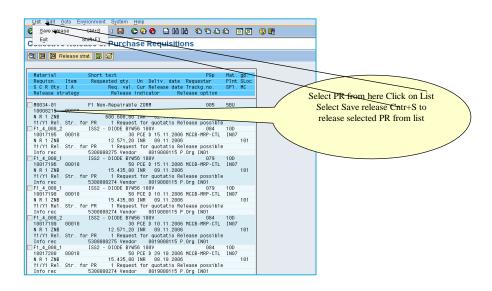


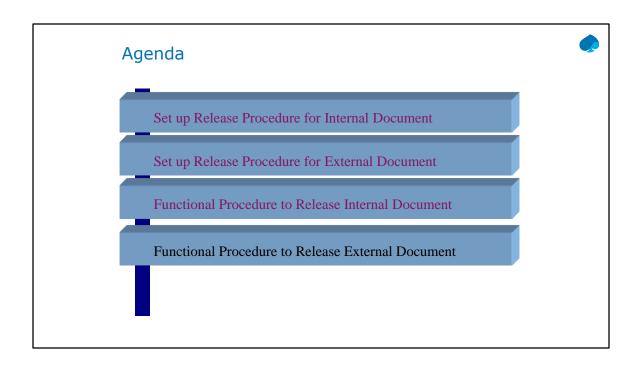


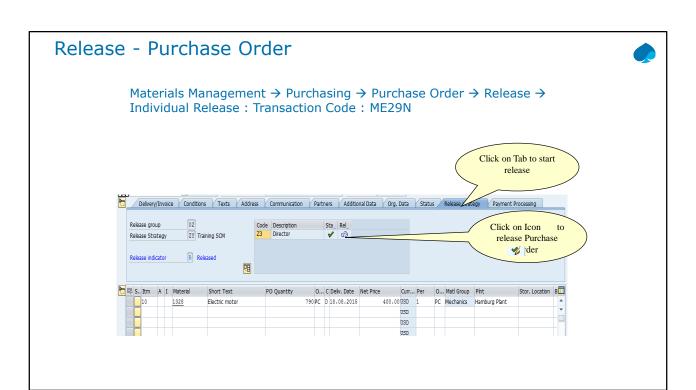
Need to explain quickly what is significant of selection criteria, how it can help. How variant will help an approver to set selection criteria.

Release - Purchase Requisition



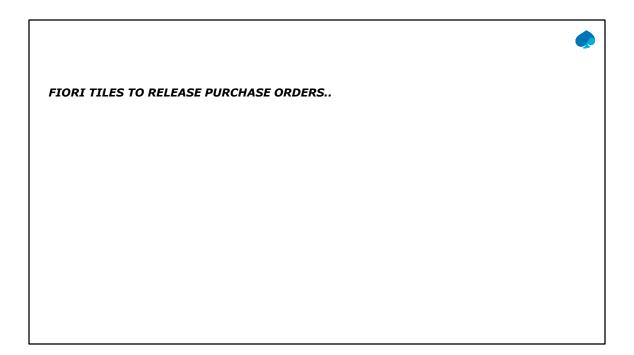


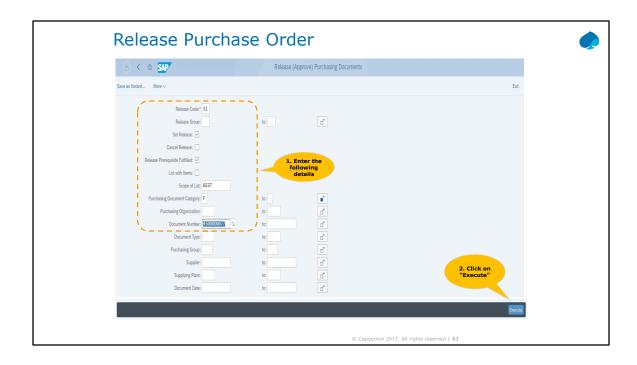


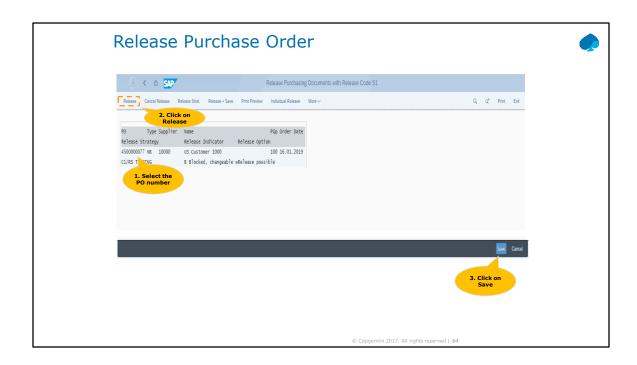


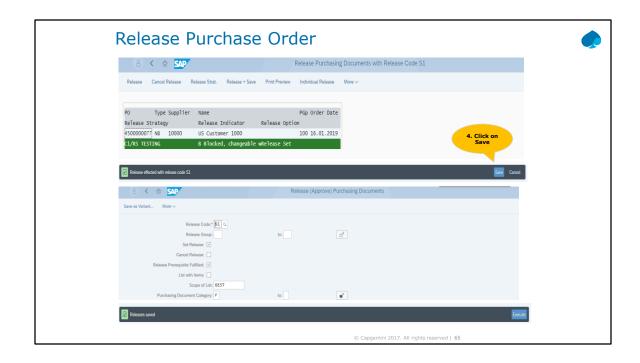
Release - Purchase Order Collective Release: Transaction Code: ME28 Release (Approve) Purchasing Documents Maintain Release Code & Release Group assign to Release code you to get List of PO in Release group ✓ Set release your release Cancel release ▼ Release prerequisite fulfilled List with items Scope of list BEST Maintain necessary criteria Puchasing document category based on which list can be 4 4 4 4 4 Purchasing organization generated here Document number Document type Purchasing group Vendor After maintaining all Supplying plant necessary criteria Click on Document date Ic to generate list of PO in your release

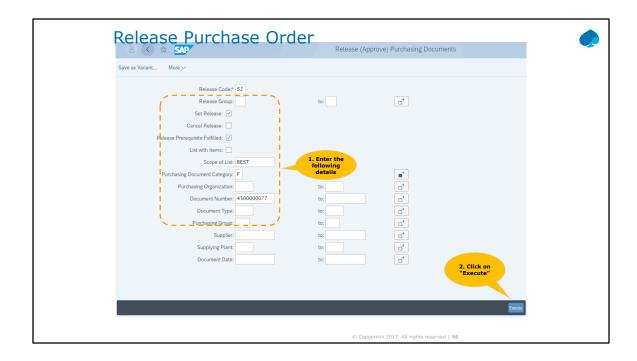
Release - Purchase Order Release Purchasing Documents with Release Code Y3 Release | Cancel release | Release strat. | Release + save | 🖨 Print preview PO Type Vendor Release strategy PGp Order date Select PO from here Click Release indicator Release option Release after click on or Cntl+S to Release possible 1400000064 ZNPP 19001503 F15-TCS001.3-1 06 oversea vendor 📙 001 02.11.200 save the release. Y2/Y2 PO Rel. Str. NPP-PM 1 Blocked Release 1400008107 ZNPP 19000007 F16 06 VENDOR MASTER DATA Release possible 101 14.12.2006 Y2/Y2 PO Rel. Str. NPP-PM 1 Blocked Release possible

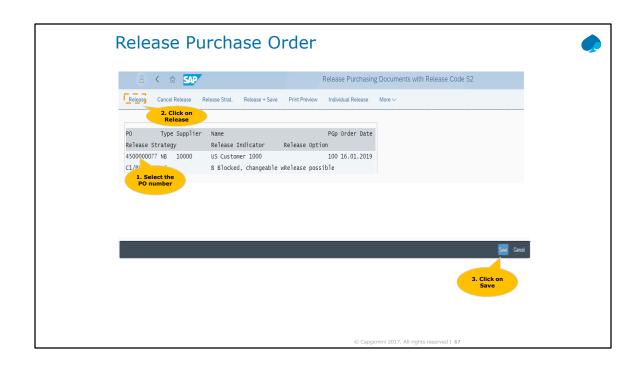


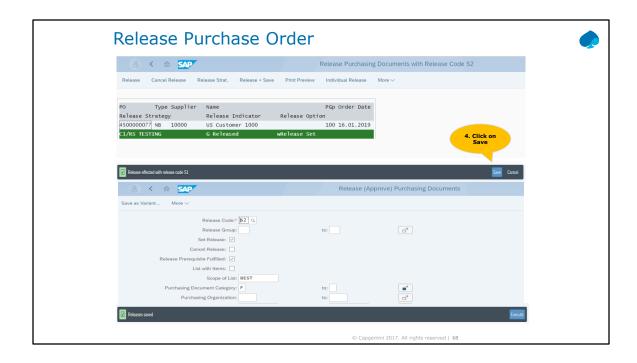


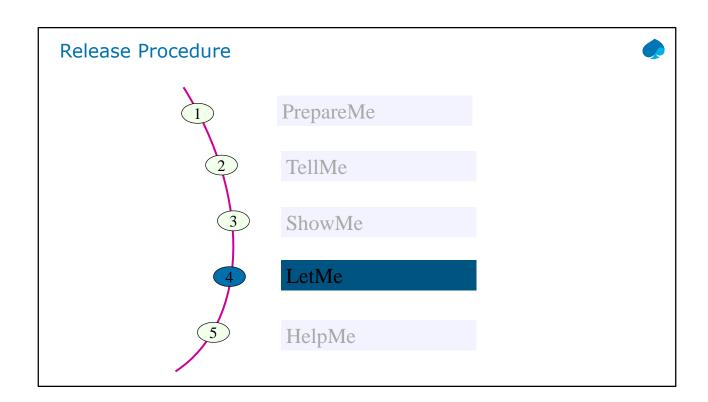














Case Study #1

ABC Corporation has business setup in Germany and India with its head quarter based in Frankfurt.

In Germany it has 2 manufacturing plants, one located in Darmstadt and the other in Hamburg. Each manufacturing plant handles only 2 type of materials, stocked in Distinct location

They need to set up a release procedure for Internal and External Document (Purchase Requisition and Purchase Order) with following criteria.





Case Study



Purchase Requisition:

Description	Criteria
No of Step in release Procedure	3 (Three) Level Release
For Plant	Plant 1 & 2
Document	For Purchase of Production Part
Level 1 Release	From 0 to 10000 Currency Value
Level 2 Release	From 10001 to 25000 Currency Value
Level 3 Release	Above 25001 Currency Value

Case Study





Description	Criteria
No of Step in release Procedure	3 (Three) Level Release
For Plant	Plant 1 & 2
Document	For Purchase of Production Part
Level 1 Release	From 0 to 500 Currency Value
Level 2 Release	From 501 to 5000 Currency Value
Level 3 Release	Above 5001 Currency Value
For Asset Purchase	All document need to release by Level 3 release.





Case Study #2

Business Example: You wish to use a release procedure to ensure that requisitions and POs that exceed a certain value limit are approved by various persons before the requested materials can be ordered or the PO can be issued to the vendor.

Task:

- Take a look at the Customizing settings for the release procedure for purchase requisitions (with classification).
- In your enterprise, users must enter requirement tracking numbers when creating purchase requisitions. For requisitions created with the requirement tracking number SCM520-##, you need a new release strategy and a new release code.
 - You must therefore define a new release strategy for requisitions.
 - First define your own release code ## for release group 01.
 - Then define the new release strategy ## with the short description Strategy ##. This should likewise be assigned to release group 01.
 - Assign release code ## to your release strategy. Confirm the release prerequisites and statuses proposed by the system.



Case Study #2 Cont...

Define the voteria for your release strategy as follows:

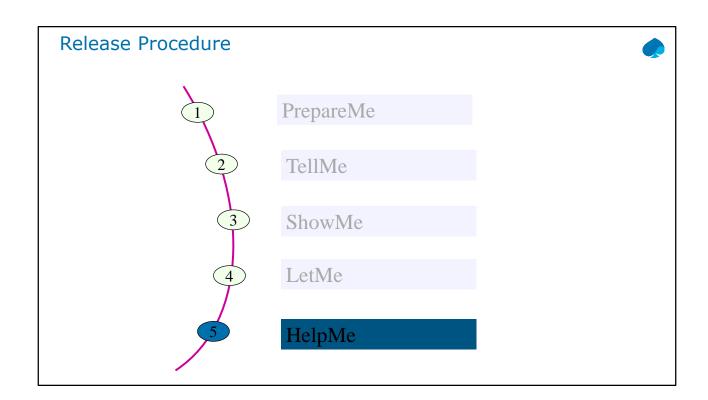
Account assignment category	blank
Material group	SCM520
Plant	1000
Purchasing group	Z##
Requirement tracking number	SCM520-##
Total value of item	> 1000 EUR
Document type	NB (purchase requisition)

Control and State of the state





ME54N	Individual Release of Purchase Requisition
ME55	Collective Release of Purchase Requisition
ME29N	Individual Release of Purchase Order
ME28	Collective Release of Purchase Order
ME35K	Collective Release of Contract
ME35L	Collective Release of Scheduling Agreement
ME85	Collective Release of Service Entry Sheet



Tips and Tricks



To close existing session and open a new session type $\!\!\!/ n$ followed by transaction code in transaction window.

To log out from session type "/nex" in transaction window.

To find out data base table in which value get stored press "F1" on field for which table need to identify and select technical application.

To open new session keeping continue with existing session type /o followed by transaction code in transaction window.

Cancel of release is also possible, only authorised person who did release can cancel release.

Additional Information



 $\label{eq:continuous} \textit{Create characteristics (in the application): SAP Menu \rightarrow Cross-Application Components \rightarrow Classification \\ \textit{System} \rightarrow \textit{Master Data} \rightarrow \textit{Characteristics} \\$

Create characteristics (in Customizing): SAP Customizing Implementation Guide \rightarrow Materials Management \rightarrow Purchasing \rightarrow Purchase Requisition \rightarrow Release Procedure \rightarrow Procedure with Classification \rightarrow Edit Characteristics

Create classes (in the application):

 $\mathsf{SAP}\ \mathsf{Menu} \to \mathsf{Cross}\text{-}\mathsf{Application}\ \mathsf{Components} \to \mathsf{Classification}\ \mathsf{System} \to \mathsf{Master}\ \mathsf{Data} \to \mathsf{Classes}$

Create classes (in Customizing): SAP Customizing Implementation Guide \rightarrow Materials Management \rightarrow Purchasing \rightarrow Purchase Requisition \rightarrow Release Procedure \rightarrow Procedure with Classification \rightarrow Edit Classes

Set up release strategy with classification: SAP Customizing Implementation Guide \rightarrow Materials Management \rightarrow Purchasing \rightarrow Purchase Requisition (or relevant External Purchasing Document) \rightarrow Release Proceed

Test Your Knowledge



- 1. Where in Customizing can you maintain release strategies for Purchasing? Choose the correct answer(s).
 - $\hfill\Box$ A For all document types.
 - $\ \square$ B For requisitions and purchasing documents separately according to document type.
- $_{\Box}$ C For requisitions and purchase orders regardless of the document type and for all other purchasing documents only with the appropriate document type.
- $\ \square$ D For requisitions with the document type purchase order and for purchase documents with all types of purchasing document, as these are all stored in the same table
- 2. What is the maximum number of release codes you can use in a release strategy? Choose the correct answer(s).
- □ A 2
- □ B 5
- □ C 8
- □ D 10

Test Your Knowledge



- 3. No release procedure with classification is available for requisitions in your system. For which document data can you set up a release procedure without classification? *Choose the correct answer(s)*.
 - $\hfill\Box$ A Item category
 - □ B Account assignment category
 - □ C Plant
 - □ D Purchasing group
- 4. What can you not do with a purchase order that has not been released? Choose the correct answer(s).
 - □ A Output it
 - □ B Change it
 - $\hfill\Box$ C Call the print view.
 - $\hfill\Box$ D Add another item to the purchase order.

Answers



1. Where in Customizing can you maintain release strategies for Purchasing?

Purchasing documents only have one table for release strategy. Distinction can be made by purchasing document type if this is a component part of the release strategy.

2. What is the maximum number of release codes you can use in a release strategy?

Answer: C

3. No release procedure with classification is available for requisitions in your system. For which document data can you set up a release procedure without classification?

Answer: B, C

See also the documentation for the IMG activity "Setting up procedure without classification".

4. What can you not do with a purchase order that has not been released? Answer: A

The purchase order can be changed at any time before the release is started (answer B). After the release process has started it depends on the settings in the release indicator assigned to the release step as to whether it can be changed or not.