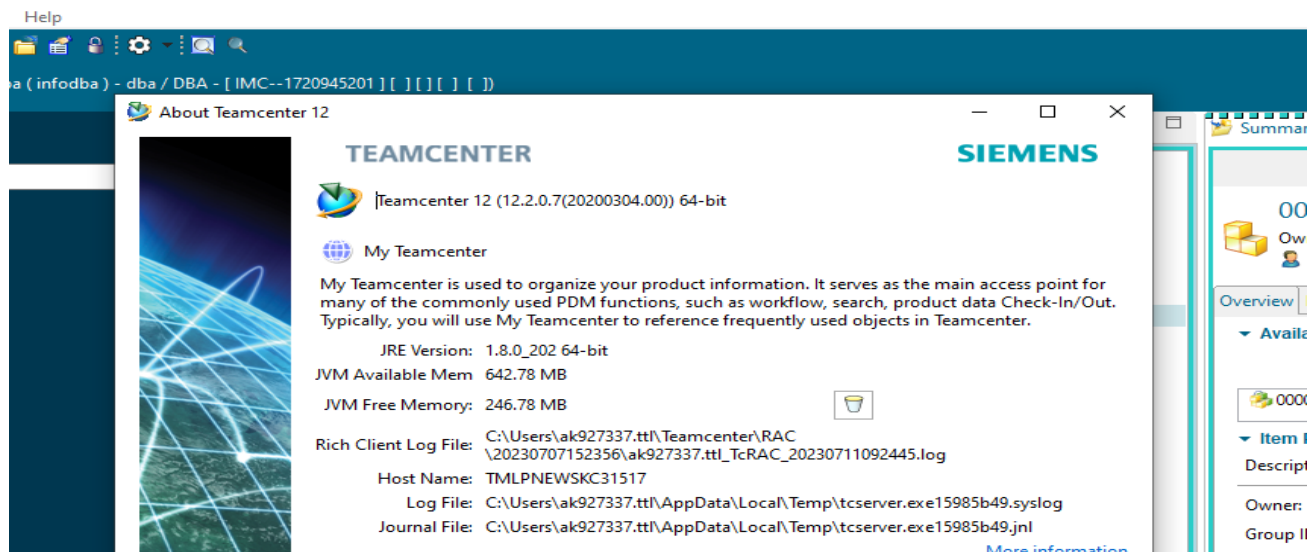


## 1.) Where to find syslog and general information of Teamcenter?

All general information about Teamcenter like syslog can be found in Help -> about session.



## 2.) What is the menu bar options available in the menu bar of Teamcenter 2tier client?

File, edit, View, Translation, tools, window, help.

## 3.) What are the major views available in Teamcenter and how an extra view?

The major views that are available are summary, details, Impact analysis, viewer, JT preview, Process history etc.

To add an extra view Windows -> show view -> others.

## 4.) What are the default folders available in-home folder?

Client cache, metadata stamp templates, Requirement management templates, Mailbox, new stuff, MS office templates

## 5.) Explain summary view?

Summary view contains basic summary or information of the selected item. Summary view contains two major tabs Overview tab and audit logs tab, related dataset etc.

## 6.) What are the major actions available in summary view?

For Item -> Copy, Saveas, New workflow process.

For Item master form -> New workflow process.

For Item revision -> Copy, Revise, Save As, New workflow process.

For Item revision master form -> New workflow process, Copy

**7.) Explain detail's view? What information can we find in detail related to an item?**

Detail's view shows all the details of the item. Details displayed are like

Object name, type, release status, group, owner, date modified etc.

**8.) Explain Impact Analysis view?**

Impact analysis view shows the impact cause if the select item is disturbed. The three major options available in the view are where used, where referenced, depth .

Types of depth are like -> One level, All level, top level.

**9.) Explain Viewer View?**

Viewer view shows information like name, description, owner, groupid, last modified user of selected item. The major tabs available here are general, Reversation, project, All etc.

**10.) What are the major modules of Team center?**

My Teamcenter, organization, structure manager, Workflow designer, Workflow viewer, Classification, Classification admin etc. are some major modules.

**11.) How to reset perspective in team center?**

To reset perspective, go to menu bar window -> reset perspective.

**12.) What content is displayed in my worklist?**

Task to perform, Task to Track, Schedule tasks, Subscription messages etc.

**13.) What are the major default groups available in the organization?**

BIW\_Planner, Engineering, dba, Sponsor, System.

**14.) What are the major default roles available in the organization?**

DBA, Designer, Project Administrator, Project admin.

**15.) Name the default user in organization?**

Infodba with dba as group and DBA as role.

**16.) Name the default person in the organization?**

Infodba

**17.) What are the mandatory properties to fill while making a person?**

Only name is the property to be fill while making the person.

**18.) What are the properties to fill while making a user?**

Person name, userid , OS name, default group.

**19.) How to make a user an inactive user?**

To make a user inactive go to user information in organization module and select the option as inactive.

**20.) What is a site in organization in teamcenter ?**

Site is like a virtual work location. Where all the industrial or all the teamcenter related activities are going on.

**21.) How to search for preferences in teamcenter ?**

Menu bar

Edit menu -> options -> search.

**22.) How to set the names of properties to the there real names in UI of teamcenter ?**

Menu bar

Edit -> options -> General properties -> UI properties -> sys Admin -> select real property name radio button for enabling the feature.

**23.) What is discipline in teamcenter ?**

Discipline is a set of users who have a common behavior, for example, developers that have expertise in UNIX.

**24.) What is the role?**

A role is an object that models the type of work a user is expected to perform in a group.

Or basically the actions which are defined for a user to perform in teamcenter.

**25.) What is a group?**

A group represents a project in teamcenter. Group contains members (users) who take on a role or multiple roles in the group. Groups represent data ownership and therefore control data access. Two groups are provided with teamcenter : **data and system.**

Or basically groups are a collection of people who have similar properties, similar access and similar actions to perform in teamcenter.

**26.) What is a subgroup?**

A subgroup is a group with another group designated as its parent. A subgroup can also be designated as a parent group itself.

Or basically a group within a group with some special task, properties or access rights.

**27.) What is a person?**

Persons are individuals who work at your site. A person has properties such as name, address and employee number.

**28.) Name the teamcenter object which stores the information of Bom and Bom properties.**

BOM Line is a runtime teamcenter business object which stores the information and BOM properties.

Business object

- 1.) POM\_object
- 2.) Runtime Business Object -> BOMLINE

**29.) What are the major properties of the BOMLINE?**

- 1.) bl\_indented\_title -> To store the title or information of the available Bom line.
- 2.) bl\_item\_object\_type -> To display the type of the component which is stored in the Bom.
- 3.) bl\_config\_string -> To display the components as per the currently active revision rule.
- 4.) bl\_rev\_release\_status -> To display the available release status on the component in the Bom.
- 5.) bl\_sequence\_no -> To display sequence no available on the component in the Bom.

**30.) List some major runtime business objects which are used in structure manager?**

1. BOMDerivedDefault
- 2.) BOMFixedDefault
- 3.) BOMLine
- 4.) BOMOption
- 5.) BOMOptionIndexExpr
- 6.) BOMRuleCheck
- 7.) BOMVariantExprBlock
- 8.) BOMVariantRule

**31.) What is volume in organization of Teamcenter?**

A volume is a location where files are stored. A volume equated to a directory on the operating system. Files stored in volumes are created by CAD applications and other third-party applications.

**32.) What is paste?**

Paste moves a data object reference from the clipboard to the current location in the data object area.

**33.) What is paste special?**

Paste special allows you to specify a relation type rather than using the default paste relation.

**34.) What is purge?**

Purge is an option which is used to remove all the old versions of the datasets from the database as per the sequence limit.

**35.) What is makes immune?**

Make immune is an option which specifies an item revision sequence cannot be deleted from the system by a purge or check-in action.

Or basically to save item revision from getting deleted. Users can select the make immune option. Selected dataset will not be deleted even after purge operation.

### **36.) What is Remove immunity?**

Remove immunity removes the functionalities provided by make immune. Once immunity is released, the dataset will be deleted if purge operation is initiated.

### **37.) What are named references?**

Named references are the files attached to a dataset object. A single dataset object may have one or more named references. To view named references of a dataset from the teamcenter rich client, in my teamcenter, select the dataset and choose view-> Named references or right-click the dataset and choose named references.

### **38.) What is the revision rule?**

Revision rules are basically the parameters set by the user that determines which revision of an item is used to configure product context.

Item revision will be displayed in the Bom as per the revision rule selected.

Revision is also an object in teamcenter data model.

Businessobject -> PomObject -> Pom\_applicationObject -> Workspace object -> Revision rule.

### **39.) What is pack?**

Pack feature basically packs the selected lines so that all lines with the same item revision and find number are displayed as a single line.

### **40.) What is unpack?**

Unpack the selected lines so that they are displayed as separate lines, one for each occurrence.

### **41.) What is pack all?**

Pack the packable lines in the displayed structure.

### **42.) What is unpack all?**

Unpack all lines in the displayed structure.

### **43.) How to apply revision rules in structure manager?**

To apply revision rule, select Tools in menu bar -> Revision rule -> View/Set Current.

### **44.) List some major revision rule available in teamcenter ?**

Some major rules which are available are Any status, Latest working, Latest by alpha revision order, Latest by creation date, Precise only, Precise any status, working etc.

**45.) What is effectivity?**

Effectivity option allows you to view and edit the effectivity of the change object.

Effectivity specifies the date or unit number effectivity of the incremental change.

Rule used to set effective dates on released products and processes with a released status.

**46.) Types of effectivity?**

Revision effectivity, Occurrence effectivity.

**47.) How to apply effectivity in structure manager?**

Tools -> effectivity -> Select effectivity.

**48.) What is Imprecise assembly?**

A single level assembly that has items as the components. Teamcenter determines the applicable revision from the revision rule settings.

**49.) What is Precise assembly?**

A single-level assembly that has specific item revisions as the components. When Teamcenter applies the revision rule, the precisely specified item revision is configured by a precise entry in a revision rule.

**50.) What is occurrence effectivity?**

Allows you to view, edit, or create occurrence date effectivity data for the occurrence of the selected line. You must have the appropriate permissions to create or edit effectivity data.

**51.) What is Revision effectivity?**

Allows you to view, edit, create, or copy effectivity data for the item revision of the selected line. You must have the appropriate permissions to create or edit effectivity data.

**52.) What is the find number?**

A number that identifies individual occurrences (or group of occurrences) within a single level assembly. Components are ordered by find number within an assembly. Components are ordered by find number within an assembly.

**53.) What is occurrence?**

A hierarchical structure relationship between the immediate parent assembly and its child component item (in an imprecise assembly). Or item revision (in a precise assembly).

**54.) What is a part?**

A business object represented by an Item in teamcenter or in product structure.

**55.) What is MRU in structure manager in teamcenter ?**

MRU stands for Most recently used. This option in structure manager allows the user to search most used components immediately.

**56.) Is it possible to clone a structure in teamcenter ?**

Yes, it is possible to clone a structure in teamcenter.

**57.) What is Variant in structure manager?**

Variant is a specific structure that is configured by applying a variant rule.

**58.) What is variant condition?**

A condition that a user sets on an occurrence to specify the option values that configure the occurrences. More complex conditions statements may also be defined.

**59.) What is a variant rule?**

A collection of option values, typically set by a marketing user to determine the variant of the structure to configure. A saved variant rule is a persistent data object.

**60.) What are the types of the variant supported by the teamcenter ?**

Modular variant and classic variant

**61. What is Workflow?**

A workflow is the automation of business procedures in which documents, information, or tasks are passed from one participant to another in a way that is governed by rules or procedures.

**62.) What is a template in workflow?**

A task template is a blueprint of a workflow task. A task is a fundamental building block used to construct a workflow process. Each task defines a set of actions, rules and resources used to accomplish that task.

**63.) What is EPM\_go and EPM\_nogo ?**

Both of these are the options available to pass or stop the workflow in between of the handler as per the requirement.

Both these options are defined in epm.h header file.

**64.) What are handlers in the workflow of teamcenter ?**

Workflow allows you to select an existing handler or define a new one. The system reads an existing handler from the property file.

**65.) What is a workflow process?**

A workflow process describes the individual tasks and the task sequence required to model the workflow process. In Enterprise process modelling (EPM), tasks have both temporal time and hierarchical relationships, which allows individual tasks to complete sequentially or asynchronously (in parallel).

A workflow process template is a blueprint of a workflow process.

**66.) List some major tasks which are present in workflow template?**

Do task, Perform-sign off, Route task.

**67.) What are subprocess?**

Subprocess are workflow processes associated with a parent workflow process. Subprocesses are started from the parent workflow process under each task of the parent workflow process.

**68.) What is a perform task?**

Starts the required work for the task. For example, to complete a select-signoff-team task, the responsible party clicks the perform task button and then selects team members meetings the defined group and role requirements to complete the task.

**69.) What is Do task?**

Inserts a do task into the workflow template. This task has two options, if at least one failure path is configured: Complete confirms the completion of a task and triggers the branching to a success path. Unable to complete indicates the task is unable to complete, for various reasons.

**70.) What is a review task?**

Inserts a review task into workflow template. This task uses the select-signoff-team and perform-signoffs subtasks, each of which has its own dialog box.

**71.) What is abort in workflow?**

The process of canceling a workflow in between is called aborting.

The task is canceled, and the workflow process is exited without being completed.

**72.) What is ad hoc process modification?**

Workflow Viewer allows privileged users to modify active workflow processes one template at a time. Privileged users can add, remove, rearrange and modify tasks, flow paths, handlers, and other elements of the workflow process template while workflow processes based on the template are running. This functionality is called ad hoc process modification.

**73.) What are the options available in workflow viewer to stop a workflow?**

There are three ways to stop a workflow process in Workflow Viewer:

- Suspend Stops the process from moving forward. Choose Actions Suspend. You can resume a suspended process by choosing Actions Resume.
- Abort Cancels the process but keeps the process in the system. Choose Actions Abort.
- Delete Removes the process from the system. Choose Edit Delete

**74.) What is review Quorum?**



Number of users who must vote to approve a task for that task to be approved.

**75.) What is Ad-hoc-done?**

Indicates you have completed adding signoff member assignments to this task.

**76.) What are the types of perform-signoffs?**

There are majorly two types of perform-signoffs are available

- 1.) Review signs off -> with which the user can elect to Approve, Reject or make no decision for the selected task.
- 2.) Acknowledge signoff -> With which the user can elect to acknowledge or not acknowledge the selected task.

**77.) What are environment variables in teamcenter ?**

Environment variables are settings stored in the **tc\_profilevars** properties file that allow you to control many aspects of Teamcenter behavior.

**78.) What are the major environment variable with are required for the proper functioning of teamcenter ?**

FMS\_HOME, JAVA\_HOME, JRE\_HOME, TC\_ROOT, TC\_DATA.

**79.) What is TC\_DATA ?**

**TC\_DATA** defines the directory containing teamcenter data files. Protected variable. This environment variable is set during teamcenter installation and added to the TC\_DATA/tc\_profilevars property file.

**80.) What is TC\_ROOT ?**

**TC\_ROOT** is the topmost directory in the hierarchical structure of directories of teamcenter. This directory contains major file's, folders and major information which is used in proper functioning of the teamcenter.

**81.) What is TC\_TMP\_DIR ?**

**TC\_TMP\_DIR** is the temp directory of user where teamcenter stores temporary files which are used in its the functioning .

**82.) What is TC\_MENU ?**

**TC\_MENU** is the directory to set the environment variables of the teamcenter. This directory is inside the TC\_ROOT directory of the teamcenter.

**83.) How to set the environment variables of the teamcenter ?**

To set the environment variables of the teamcenter go to TC\_ROOT -> TC\_MENU -> open cmd -> open config.bat -> type set command and click on enter -> enter set the variable as per the requirement.

**84.) What are the major debuglevels which are available in teamcenter ?**

The major debug\_levels which are available in teamcenter are like

True, false, debug, info, warn, error, fatal etc.

**85.) What are the types of syslog's available in teamcenter ?**

Teamcenter majorly produces two types of files

1.) Syslogs ---- .log

2.) Application logs ----- .jnl, . syslog, .log

**86.) How to make secure pwf (password file) in teamcenter ?**

Password files can be made with the help of tem.bat (Teamcenter environment manager) or the install utility.

An environment variable contains the password string to be encrypted.

**86.) List some saved utilities which are provided by teamcenter ?**

1.) make\_user.exe - > To create new user.

2.) Clearlogs.exe -> To clear the previous teamcenter sessions.

3.) list\_users.exe - > To get the list of the available user in teamcenter.

4.) item\_report.exe -> To get the report of an existing item

5.) item\_rename.exe -> To rename an existing item.

6.) install.exe -> To generate encrypted password file.

**87.) What is the use of query builder object ?**

The query builder application in teamcenter allows you to create customized searches for objects in both local and remote teamcenter databases.

**88.) What are saved queries ?**

Query which are default available are called saved queries. All the queries whose definition is available are called saved queries.

**89.) What are boolean rules in Query builder ?**

The boolean rules are used to combine clauses to create a custom query. When you use and clauses together, both must be satisfied to return a match. When you use OR clauses together, either can be satisfied to return a match.

**90.) What are the major saved queries ?**

1.) General... 2.) Item... 3.) ItemRevision... 4.) Remote... 5.) All sequences.

**91.) Is it possible to import and export queries in teamcenter ?**

Yes, It is possible to import and export queries in teamcenter.

**92.) Name the path where all the .dll and .exe of the teamcenter are stored ?**

D:\TC\_2Tier\Tc\_Root\bin

**93.) What is the use of access manager ?**

Access manager enables you to control user access to data objects stored in teamcenter by:

Defining rules and by defining access controls lists (ACL). For using Access manager user must have dba access or must have all administrative rights.

**94.) How are rules defined in teamcenter ?**

Rules are defined by a combination of

A condition , A value for the condition , An access control list that grants privileges to accessors.

The ACL defines the privileges granted to the user.

**95.) Define ACL of access manager ?**

Access control list contains a list of accessors and the privileges granted, denied, or not set for each accessors. Accessors are collections of users who share certain common traits, such as membership in the group that owns the objects or membership in the project team.

ACL are associated with conditions in the rule tree as part of a rules-based security model, and they can be used in more than one rule.

**If an ACL is modified by a user, other users who are logged on at the same time are not affected by the updated ACL until they log off and log on again.**

**ACLs do not control the creation of objects. They only determine what operations can be performed on existing objects.**

**96.) Is it important to check the hierarchal structure of the rule tree ?**

Yes, it is very important to check the hierarchal structure of the rule tree it is because rule are given priorities on the basis of there position in the rule tree. Rule with higher priority impact major changes in teamcenter.

Precedence determines the privileges granted. Rule precedence is from top to bottom in the tree, with the highest rule having greatest precedence and the lowest rule having least precedence.

**97.) What is ITAR in access manager ?**

ITAR stands for International Traffic in arms regulations.

**98.) How is an accessor in access manger ?**

Access Manager component that grants or denies privileges to clusters of users who share certain common traits (for example, perform the same function or work on the same project).

### **99.) What is ADA License ?**

Teamcenter application that administers ITAR, intellectual property(IP), and excludes licenses. It provides enhanced control and new attributes for these licenses. ADA stands for the Authorized Data access.

### **100.) What is change manager ?**

Change manager is teamcenter module that helps in tracking changes to a product throughout its lifecycle. You propose change to a product and then manage the entire cycle of review, approval, and Implementation of the change.

Process involved

- 1.) Identify driver for change.
- 2.) Authorize solution.
- 3.) Implement change.
- 4.) Incorporate.

### **101.) What is PR,ECR,ECN ?**

PR – Stands for Problem report.

ECR – Engineering change request.

ECN – Engineering change notice.

### **102.) What is a change ?**

Change is an activity or a teamcenter process responsible for a change in teamcenter task, workflow or a process.

There are three main type of change objects.

- 1.) PR – Identify change – Problem report.
- 2.) ECR – Authorize change – Change request.
- 3.) ECN – Implement change – Engineering change notice .

### **103.) What is PR ?**

PR stands for Problem request.

A PR captures information about a problem or an enhancement. It includes the information necessary to confirm and reproduce any problems observed or to document the specifics of a request for an enhancement. Additional attributes document the perceived severity of the problem and set the priority for addressing the issue relative to other PRs. The processing of a PR sometimes leads to the creation of an engineering change request (ECR).

**104.) What is ECR ?**

ECR stands for Engineering change request.

Initiates a proposal that recommends a change and captures business decisions associated with the change.

An ECR proposes a solution to the problem with cost estimates and benefits of making the change. The actual solution (for example, a new item revision) is implemented in the change notice (ECN).

An ECR is typically a response to a PR unless the PR stage is skipped.

A single ECR may logically group and address issues identified in multiple PRs. An ECR may be addressed by one or more ECNs.

**105.) What is ECN ?**

ECN stands for engineering change notice

Implements a change.

It provides a detailed work plan to resolve one or more ECRs or a portion of one ECR.

An ECN identifies all items and documents affected by a change and authorizes the actions that address a change.

**106.) What is DR ?**

DR stands for Deviation request

Seeks consent to deviate from a solution in production to resolve a set of problems to initiate improvements. Typically, there are two types of deviation requests:

- Request for deviation Seeks consent to deviate from a part solution.
- Request for waiver Seeks consent to accept a non-conforming part.

**107.) What is PR process ?**

1. Validate the problem report.
2. Assign Analyst.
3. Analyst PR/Approve/Reject.

**108.) What is ECR Process ?**

- 1.) Classify/Assign Analyst
- 2.) Planning status
- 3.) Process
- 4.) Derive change

5.) ECN Process

6.) Complete Planning

**109.) what is ECN ?**

1. Classify/Assign Analyst.

2. Complete Planning

3. Change Implementation board review

4. Record implementation decision

5. Disposition

6. Execute change

7. Close change

**110.) What are change states ?**

The three major change states are Maturity, disposition and closure.

- A Closure state of Open
- A Maturity state of Elaborating
- A Disposition state of None

Maturity is a substate of the Closure state Open, and Disposition is as a substate of the Maturity state Reviewing.

**111.) What is closure ?**

Closure defines the status of the change object. Change objects start with an open state and remain there until the change is complete unless a decision is made to defer or cancel the change. The Closure change state can be one of the following.

**Open**

**Closed**

**On hold**

**Canceled**

**112.) What is Maturity ?**

Maturity defines the degree of completion of the overall change process. The elaborating state is the investigation phase. The reviewing state can be informal where one user approves the change or formal where a review board must approve.

The maturity change state can be one of the following.

**Elaborating**

**Reviewing**

**Executing**

**Complete**

### **113.) What is Disposition ?**

Disposition represents a technical, business, or implementation decision by a person or review board about a change object's approval.

When a change object is created, the Disposition value is set to None (no disposition), which is the default.

During review, the value should be set to Investigate and once a decision has been made, the value set to Approved, Disapproved, or possibly Deferred.

The Disposition change state can be one of the following:

- **None (default value on newly created change objects)**
- **Investigate**
- **Approved**
- **Disapproved**
- **Deferred**

In Change Manager, an incident report is called a problem report.

In Change Manager, a change solution collector is called an engineering change request (ECR).

In Change Manager, a change implementation collector is called an engineering change notice (ECN).

### **114.) Explain change process ?**

1. Author PR
2. Approve PR
3. Create PR
4. Evaluate PR
5. Make business decision
6. Derive ECN.
7. Prepare Implementation
8. Approve ECN
9. Assign Effectivity

10. Execute change

11. Close change.

**115.) Explain classification module ?**

Teamcenter application that utilizes a classification hierarchy to categorize product data on the basis of several classification classes.

**116.) Explain classification admin ?**

Classification admin is teamcenter application that is responsible for creation , management and maintenance of classification groups, classes, attributes etc. It is mandatory to have dba access to use this module.

**116.) What is abstract class ?**

Classes which are made to serve as a parent of other classification classes or storage classes.

Benefit of making of an abstract class is to inherit attributes and properties to subclasses.

Business objects can not be classified in abstract classes.

**117.) What is a group ?**

Collection of related classes.

**118.) What is storage class ?**

Class in which Classification instances (ICOs) are stored. Storage classes can be positioned anywhere in the hierarchy, including the leaf node position.

**119.) What are ICOs.**

ICO's stands for Classification Instances. Objects which are classified under a classification class.

**120.) What are the two types of classes available in classification class ?**

Storage class and Abstract class.

**121.) What is a classification attribute ?**

Characteristic that distinguishes one instance of a class, subclass, or view from another.

For example , within the sheet metal screws class, the length, diameter, and thread attributes distinguish one sheet metal screw from another.

**122.) What are the mandatory requirements for making a class in classification module ?**

Id or class name is the mandatory requirement for creation of the class.

**123.) How to classify a business object ?**

To classify a business object



-> Right click on the business object and send that object to classification module.

Save the changes in the classification module to make that object classified.

#### **124.) What is SAM classification root ?**

SAM classification root is at the at top hierarachy of classification module which will contain all the groups and class of the classification.

#### **125.) What are some basic requirements for making a query rule ?**

Name,Description,Query Type , search type, Modifiable query type are the some basic requirement to make a query.

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### **BMIDE**

#### **1.) What is BMIDE ?**

BMIDE stands for Business modeler IDE . It is a tool for configuring and extending the data model of your teamcenter installation. The data model objects defines the objects and rules used in teamcenter.

Major objectives of bmide

- 1.) Customize data model.
- 2.) Add to LOV to business objects.
- 3.) Add Business rules.
- 4.) Add release status.
- 5.) Add condition etc.

#### **2.) What are the major rule available in BMIDE ?**

- 1.) Naming rule.
- 2.) Deepcopy rule.
- 3.) Extension rule
- 4.) Display rule
- 5.) GRM rule
- 6.) ID Context Rules
- 7.) Property rule
- 8.) ID context rule

9.) Verification rule.

### **3.) What are the three types of development available in bmide ?**

HOT deploy and cold deploy and live update deployment.

### **4.) Difference between hot deploy and cold deploy ?**

Hot deploy – In hot deploy process software package of the bmide template project is generated which is then deploy through temp.bat file in teamcenter database. There are very least chances of failure and data losses.

Cold deploy – In cold deploy process deployment of bmide template project is done directly through the deploy option given in BMIDE module. There are some chances of failure or data losses.

### **5.) What is GRM rule ?**

Generic Relationship Management (GRM) rules to limit what objects can be pasted to other objects. For example, if you do not want a certain type of object to have a specification relation to another type, you can set the cardinality to 0 to deny pasting of one type of object to another with the specification relation.

### **6.) What is Naming rule in BMIDE ?**

Naming rules define the data entry format for a business object property. Naming rules can be used to name items, item revisions, datasets, forms, projects, and work contexts. They can also be used to name any persistent string property. A naming rule consists of rule pattern and a counter. After you create a naming rule, you must attach it to the business object property. You can also attach the naming rule to a property on all business objects that use that property.

### **7.) What is Display rule in BMIDE ?**

The Display rule controls the visibility of the business object. Business objects are displayed to user, groups and role on the basis of their visibility allowances.

Display rules determine the members of the organization who cannot view a business object type in menus in the Teamcenter user interface. The Display Rules editor displays the groups and roles that are not allowed to see the selected type of business object in menus. This rule is primarily used to hide business objects from creation (File→New) menus, thereby restricting those who can create the business object type.

### **8.) What is Deep copy rule ?**

Deep copy rules define whether objects belonging to a business object instance can be copied when a user performs a save as or revise operation on that instance. Deep copy rules can be created for any business object.

### **9.) What is cardinality ?**

Determines the number of allowed occurrences of the primary object in relation to the secondary object, and of the secondary object in relation to the primary object.

#### **10.) What is changeability ?**

Specifies whether the relationship links between objects can be added, deleted, or otherwise changed.

#### **11.) What is attachability ?**

Specifies whether new relationship links can be made between objects.

#### **12.) What is detachability ?**

Specifies whether the relationship links that exist between objects can be removed.

#### **13.) What are LOV's ?**

LOV's stands for list of values . LOV's are pick lists of data entry items.They are commonly accessed by teamcenter users when they click an arrow in a data entry box.

BMIDE contains extension folder -> Folder contains LOV .

There are three main type of LOV .

- 1.) Batch
- 2.) Classic
- 3.) Dynamic

#### **14.) What is Batch LOV ?**

Batch LOV stores the lov values in the teamcenter database rather than storing them in the template.

#### **15.) What is classic LOV ?**

Classic LOV stores the LOV values in the template.

Classic LOV is of two type

1. Interdependent LOV
2. Cascading LOV

#### **16.) What is Dynamic LOV ?**

Dynamic LOV reads the LOV values dynamically by querying the database.

#### **17.) What are the data types which are available in teamentter ?**

-> Primitives data types - bool,char,double,float,int,long,void.

->Template data type - map,set,vector

-> External data type - date\_t,string,tag\_t

#### **18.) What is a data model ?**

The teamcenter datamodel is a collection of abstract objects structured and organized to represent

Part design and design document, and the relationships between them

And the business process applied to them.

#### **19.) What is a class in BMIDE ?**

A class represents an object table in the database. Each row in the database table is an instance of the class.

#### **20.) What are attributes ?**

Attributes are the persistent characteristics of the class. Attributes of a class define the columns of the class table in the database.

#### **21.) What are Business objects ?**

A business object represents a type of business data that you handle in a teamcenter client. Business object let us define the values to store in the database and set how objects behave, such as their list of values, naming rules, display names, and so on.

Secondary business objects are child business objects that store their information on their parents business object's storage class and do not have a storage class of their own.

#### **22.) What are properties in BMIDE and what its types ?**

Properties are business objects characteristics. There are four property types available in BMIDE.

**Persistent** – Holds permanent values. Persistent properties are stored in their business objects storage class as an attribute. In other words, attributes of a storage class are expressed as persistent properties on the business object that uses that storage class.

**Runtime** – Displays values calculated at run time. When the values of a runtime property is requested. The system calculates it.

**Compound** -Retrives the values of a property specified on another business object and uses it for the compound property.

**Relation** – Defines relationship between objects.

#### **23.) When to use HOT deploy and when to cold deploy?**

While deployment it is to be taken care that major changes which affects teamcenter datamodel must be deploy through hot deployment process.

In case if server is not affected by any of the activity, then cold deployment can be used.

Is It always to be taken care that all the major schema edits to be done through the hot deployment process.

#### **24.) What is cascading LOV?**

A cascading LOV (also known as a hierarchical LOV) is an LOV whose values have their own sub-LOVs, for example, a list of states that each contain a list of cities.

#### **25.) What is Interdependent LOVs?**

LOV's which are dependent on other LOVs or their parent LOV's for their values are called as Interdependent LOV.

## **26.) What is propagation rule ?**

A propagation rule is a definition for automatically copying a property value from a source business object instances to a destination object instance. When an operation such as checkin, checkout, create , Delete,export,Import , revise,save,saveas is performed on a business object, applicable propagation rules automatically copy certain of its property values to related or referred destination objects.

Runtime

A propagation rule has been defined to automatically copy the property values

- *from* instances of an item revision
- *to* any dataset related to the item revision instance
- when an operation on the item revision instance occurs.

## **27.) What are business object ?**

Business objects can be either persistent or run-time business objects.

Persistent business objects are stored in the database in their associated storage class.

The run-time business objects are not stored in the database but are calculated at run time.

Run-time objects (children of the RuntimeBusinessObject object) function much like standard business objects. Although run-time business objects are not persisted in the database as business objects, you can add properties to the run-time business objects, and those properties can be made visible in the user interface.

## **28.) Explain the process of creating custom business objects,custom release status, custom properties,relations etc ?**

All custom business objects,release statuses,relations or properties can be made by directly accessing

Their parent class and all parent class property through BMIDE datamodel.

## **29.) What are IRDC Objects in BMIDE ?**

Objects that define how item revisions are handled at specific times in the life cycle, such as at item creation, checkin, checkout, save as, and revise. IRDC objects are defined in the Teamcenter Business Modeler IDE application.

### **30.) What is operation discriptor.**

The Operation Descriptor tab displays the metadata of the properties on the selected business object.

CreateInput operation on this tab to choose the properties that are seen in dialog boxes when the user creates items.

SaveAsInput operation on this tab to choose the properties that are seen in dialog boxes when the user performs a Save As operation on an item.

### **31.) how to add acl in workflow.**

With the help of "EPM\_set\_rule\_based\_protection" Handler ACL can be added in workflow.

### **32.) What is custom\_register\_exit and what are its arguments.**

custom\_register\_exit -> It is an ITK API used to register Handler function.

```
const char *          context,  
const char *          base_ftn_name,  
CUSTOM_EXIT_ftn_t     custom_ftn
```

### **33.) How to assign work flow task to particular group and role.**

EPM-adhoc-signoffs Handler allow to assign Workflow task to particular group and role.

### **34.) What is sequence number.**

It is an ID number which is created and attached to an object when a check operation is performed.

Every check-In Check out operation will create a new sequence number.

### **35.) how to find an object with UID.**

-> Window -> Show view print Object.

### **36.) How can i display a particular relation to a particular group of users.**

### **37.) What is the argument of SA\_find\_user.**

-> User ID and Tag variable to store output tag of user.

### **38.) Can we hide relations with display rule.**

No, we can't hide relation with display rule.

### **39.) Method message customization.**

-> Precondition, Pre action, Post action comes under method message customization. These operation control Task to be done before or after happening of something.

### **40.) Parent of workspace object.**

-> POM\_application\_object

### **41.) How to Register dll in Teamcenter.**

-> Step 1 - Add callbacks() API with name of the Handler to Login.

-> Step 2 – Inside Callbacks() API Add CUSTOM\_register\_exit with arguments as name of Handler , Login\_method and Pointer to customer Handler function from where execution of Handler will take place.

-> Step 3 – Define custom function for the processing of Handler

-> Step 4 – Compile and create \*.dll file or \*.so file.

-> Step 5 – Add Name of handler in TC\_customization libraries.

-> Step 6 – Add this \*.dll or \*.so in bin folder of TC\_ROOT and restart TC.

### **42.) How to create svg Icon or How to add new icon on a business object ?**

#### **Method 1**

-> Step 1 – Right click on Object and select “Add business object ICON”

-> Step 2 – Select ICON to be added on that Particular business object.

#### **Method 2**

-> Step 1 – Add ICON in icons folder in Extension of BMIDE Project.

-> Step 2 – Change fndIcon property on business object and add name of the ICON file in it.

### **43.) What are Global Constants.**

A global constant is an extension that defines a value, which by reference can be used throughout the system. If you change the value of a global constant, then the new value applies wherever the constant is used.

### **44.) EPM\_set\_rule\_based\_protection.**

EPM\_set\_rule\_based\_protection - Handler Passes information Access Manager to determine which named ACL to use while the associated task handler is current or started. For example, if this handler is placed on the Start action of a Review task, when the task starts, the named ACL specified in the handler's argument is the ACL used by Access Manager to determine access rights for the target objects of the workflow process.











