# **CrazyEngineers Archive**

Old, but evergreen and popular discussions on CrazyEngineers, presented to you in read-only mode.

## **Teamcenter PLM Interview Questions And Answers**

@Chandan Gupta • 13 Aug, 2016 • 7 likes

Before diving straight into this subject, let me outline what PLM basically is, and what scope it offers.

## What is PLM?



**Product Lifecycle Management (PLM)** is an information-driven process of managing the entire lifecycle of a commodity from its inception, through engineering design and manufacturing, to deployment and service and finally to its disposal.

Take for example- A company ARC has released a smartphone Pol and soon wants to









needed to bring this new product to fruition.

## Benefits of PLM -

Improved cycle time

Less rework and decreased room for errors

Better use of resources

Increased productivity

Enhanced quality of product

Better design integrity

Better analytics

Better understanding of critical processes

Standards and regulatory compliance

Better communication within supply chain

Reduced cost of product; more profits.

## Preferred engineering branch(es)?

Mostly Mechanical and Computer Science engineers are preferred, but it' just not restricted to them. With proper training, even a Civil Engineer might land a job in PLM segment. I'm from the Electronic and Communications field, and I've found myself a rewarding career in this sector.

## Industries that use PLM-

You name it. PLM is making a mark in almost all know industries - Automotive, Aerospace, Medical, Machinery/Industrial, Consumer Products and Retail.

## Some important PLM software-

Teamcenter, Enovia, Windchill, Creo, Aras, Arena PLM, Agile PLM, SAP PLM, Sharp PLM.

Though all these software exist, my expertise lies mainly in Teamcenter, which is a widely used PLM tool. Teamcenter is a Siemens-developed PLM software.

## Some MNCs that recruit Teamcenter professionals-



























To be continued..

### @Chandan Gupta • 19 Aug, 2016 • 7 likes

Now I'll mostly be covering Teamcenter topics as that's the tool I'm used to the most.

Now, let's move on to the different categories of Teamcenter- 2-Tier and 4-Tier. More information on this soon.

What is an item?

In Teamcenter, Item is a folder that contains all necessary information required to manufacture that product. Now let's say we have a pen.

Item = pen

Now the folder will have all information about the pen - elements used to manufacture it, design cost, each element's cost, who is designing what part, number of revisions.









#### @Chandan Gupta • 23 Aug, 2016 • 6 likes

An **item** in Teamcenter is a structure of associated objects. The basic structure has the following things for sure-

Item

Item Master

Item Revision

Item Revision Master Form

The item types are can be any of the following - item, document, EngChange, Part, Assembly, Component, etc.

#### **Item Revisions**

Every item revision has one (or more) associated sequence ID. With every checkout the sequence ID of item revision is incremented, and the most recent sequence ID becomes the default ID.

@Chandan Gupta • 31 Aug, 2016 • 7 likes

**Teamcenter Architecture** 

\_

### 2-Tier

- **a) Client Tier** (user's local machine) This layer contains Rich client, Teamcenter server and executables, and other additional applications like TCVIS, NX that integrate with rich client.
- **b) Resource Tier** (database and volume data servers) This layer contains metadata and files managed by the system. It accommodates-

Database server

Volume

File server

4-Tier









output and host secure file cache. It also has other additional applications like TCVIS, NX that integrate with both rich client and thin client, and also Teamcenter network.

- **b) Web-tier This layer** handles client installation, process logon request, transfers client request to business logic, serves static content to client and handles communication between the client & enterprise tier-
- i) Java based and served on a J2EE web application server such as weblogic.
- ii) .Net-based and served on IIS SERVER.
- c) Enterprise Tier Host business logic, applies security rules, retrieves data from and stores data in the database and serves dynamics content to client.

Its consists of:-

A pool of server process managed by a server manager(Four tier architecture only) Transient Volumes

**d) Resource Tier** - This layer stores persistent metadata and files managed by Teamcenter. It containsDatabase Server and database

Standard Volumes

For more information, please PM @ChandanKumarGupta

@Chandan Gupta • 31 Aug, 2016 • 5 likes

**Teamcenter Interview Questions and Answers (Basic)** 











- Q1. What is PLM?
- Q2. What is Teamcenter?
- Q3. Benefit of Teamcenter?
- Q4. Please explain Teamcenter architecture?
- Q5. Please explain 2tier and 4tier Teamcenter Architecture?
- **Q6.** Teamcenter installation process? 2-tier and 4-tier.
- Q7. Item, Item revision, Dataset and Form in Teamcenter?
- **Q8.** What is difference between Item and Item revision in Teamcenter?
- Q9. What is dataset and Form in Teamcenter?
- Q10. What is the difference between a revision and version in Teamcenter?
- Q11. How to hide the dataset?

**Answer**: - Edit → Options → Search and select the Latest Dataset Versions check box.

**Q11.** How to revert to previous dataset version?

**Answer**: - Revert to a previous dataset version to track changes and undo changes to a dataset.

To revert to an earlier version of a dataset, select the dataset and choose File→Open With..

Using the Open dialog box, you can specify a particular version of a dataset And/or a specific software application (tool) to use for the current editing session.





Search





site, he can use this command to develop a revision of an existing dataset.

Q13. How to rename search?

Answer:-Rename search results

Right-click the search name at the top of the list of search results. The Explorer Popup Menu appears.

Select Rename from the menu.

Type a new name for the search results.

Press Enter.

The name of the search is changed to reflect the new name.

**Q14.** How to compare the search results in Teamcenter?

Q15. Please explain different type of release status?

Q16. What is named reference?

**Q17.** How to change corrupt dataset? Please explain procedure.

Q18. How to view/modify the named reference?

Q19. How to change default revision rules setting?

Q20. Please tell me preference name of changing default background color?

**Answer**:- The PSEPreciseColorPref and PSEImpreciseColorPref preferences can be used to set the default background colors.

**Q21**. Please explain show/hide button.

**Answer**:- You can view visualization data for the BOM assembly and components using the Show/Hide Data Panel button in Structure Manager.

You can view other assembly components in the My Teamcenter tri-pane window.

Q22. What is substitute component?

**Answer**:- Substitute components are parts that can be swapped with a particular component in an assembly. Substitutes are often defined for manufacturing purposes, permitting use of the substitute if the preferred part is unavailable.

- Substitute components are item revisions in a precise assembly and items for an imprecise assembly.
- In an imprecise assembly, the revision rule selects the correct revision of a substitute component.
- Substitute components are identified with the substitute symbol in the BOM line.
- Q23. How much mode of compare product structure in Teamcenter?
- Q24. What is the difference between Precise and Imprecise assemblies in Teamcenter?
- Q25. What is the difference between "Where Used" and "Where referenced" in









- Q27. How to change precise structure to imprecise structure?
- **Q28.** How to clone the product structure in Teamcenter?
- Q29. What is cooperate server?
- Q30. What is Clear locks Functionality?

I've tried to provide solutions to the first ten questions in posts above, and a few of the questions have been answered here itself. For the remaining questions, you may directly contact me via personal message.  $\bigcirc$ 

Hope you like these and found this helpful. Will add more interview questions soon.

#### @Chandan Gupta • 26 Sep, 2016 • 4 likes

- 1. What is organization in Teamcenter?
- 2. What is different between Person & user in Teamcenter?
- 3. What is Group in Teamcenter?
- 4. What is Roles in Teamcenter?
- 5. What is Administrative privileges in Teamcenter?

#### Answer:-

These are the privileges needed to manage Teamcenter admin data like organization, access rules, and workflows. Administrator accounts have important access to data, and anything they do might affect other data as well, so such accounts have to be handled with caution.

These key points should be kept in mind while using admin accounts-

- The **infodba** account has all the Teamcenter system-level privileges.
- The **Bypass** administrative setting supersedes other privileges.
- Members of the **dba** group with the **DBA** role have complete system privileges.
- For each group:

Create at least one member who acts as the administrator for that group
Group administrators can assign other group administrators in their group
Create a **DBA** role to manage roles for that group and assign the group administrator.
The **DBA** role for a user in a non-**dba** group has no additional privileges over any other

- group member.

  6. What is Volume in Teamcenter?
- 7. What is Different between Volume and database?
- 8. What is Site in Teamcenter and how to relate in real-time scenario?
- 9 How to dalate user in Teamcenter?



Q Search





11. What is preference name in Granting Volume access to a group does not implicitly grant access to all subgroups?

#### Answer:-

TC\_allow\_inherited\_group\_volume\_access

12. What is preference name is Percentage full of a Volume at which the file import is sent to the failover volume?

#### Answer:-

TC\_Volume\_Failover\_Trigger

13. What is preference name is Volume to use in a failover situation. This preference with the **TC\_Volume\_Failover\_Trigger** 

#### Answer:-

TC\_Volume\_Failover\_Volume\_Name

14. What is the preference name to last login deactivated user?

#### **Answer:-**

TC\_days\_non\_login\_timeout

15. What is full name of term of attributes (ADA/ITAR) in user creation in Teamcenter?

#### **Answer:-**

ADA-Authorized data Access
ITAR-International Traffic in Arms Regugation

16. What are disciplines in Teamcenter?

Answer:-Disciplines are sets of user list who have common performance or behaviour. Example:-

Support person working on Teamcenter Administrator

DBA or Group administrator privileges user to Create, Modify and Delete Disciplines Developer who has expertise in UNIX









## Mostly used Teamcenter Application

- 1. My Teamcenter
- 2. Structure Manager
- 3. Lifecycle Visualization Embedded Viewer
- 4. Workflow Viewer
- 5. Change Manager
- 6. Organization
- 7. Access Manager and more..
- **1. My Teamcenter** is the application we have able to our product and process information. The main access point of all used function, Item, Object and Checkin/Check-out and query execution. All standard functionalities are available in My Teamcenter.
- **2. Structure manager** is used to build, view, and change product structures. Structure Manager also able to product structures that were created in a CAD application like NX, CATIA etc.

Structure Manager manages the Bill of Material (BOM).

- **3. Lifecycle Visualization** application is used to view the design data and review the product structure in light-weight mode.
- **4. Workflow Viewer** is the user interface where user can track the progress of workflow process.
- **5. Change Manager** is a medium though which user can push requests to initiate, administer, analysis, approve, and execute product changes. By automating the change process, change Manager can minimize change-related rework and coordinate tasks to be performed by changing, enhancing and upgrading the product.
- **6. Organization** application enables user to create and maintain the company's association within Teamcenter by organizing user accounts and their respective permissions and user groups, roles, volume, etc.
- **7. Access Manager** enables you to control user access to data objects stored in Teamcenter.



Q Search

Channels

Members

(In case anyone wishes to contact for more information on this topic, please drop me a message)

@Vitthal Sangale • 10 Nov, 2016

gr8 work.. thanks

@satabdiplm • 21 Nov, 2016

Hi Sir,

What are the advantages and disadvantages of using 2T/4T? And which tier is recommended to be used more? Thanks in advance..

ChandanKumarGupta

**Teamcenter Architecture** 

## 2-Tier

- **a) Client Tier** (user's local machine) This layer contains Rich client, Teamcenter server and executables, and other additional applications like TCVIS, NX that integrate with rich client.
- **b) Resource Tier** (database and volume data servers) This layer contains metadata and files managed by the system. It accommodates-

Database server

Volume

File server

4-Tier

**a) Client tier -** this layer contains client application process user interface input and output and host secure file cache. It also has other additional applications like TCVIS, NX that integrate with both rich client and thin client, and also Teamcenter network.









communication between the client & enterprise tier-

- i) Java based and served on a J2EE web application server such as weblogic.
- ii) .Net-based and served on IIS SERVER.
- c) Enterprise Tier Host business logic, applies security rules, retrieves data from and stores data in the database and serves dynamics content to client.

Its consists of:-

A pool of server process managed by a server manager(Four tier architecture only) Transient Volumes

d) Resource Tier - This layer stores persistent metadata and files managed by

Teamcenter. It contains-

Database Server and database

Standard Volumes

For more information, please PM @ChandanKumarGupta

ChandanKumarGupta

**Teamcenter Architecture** 

\_

## 2-Tier

- a) Client Tier (user's local machine) This layer contains Rich client, Teamcenter server and executables, and other additional applications like TCVIS, NX that integrate with rich client.
- **b) Resource Tier** (database and volume data servers) This layer contains metadata and files managed by the system. It accommodates-

Database server

Volume

File server

4-Tier









output and host secure file cache. It also has other additional applications like TCVIS, NX that integrate with both rich client and thin client, and also Teamcenter network.

- **b) Web-tier This layer** handles client installation, process logon request, transfers client request to business logic, serves static content to client and handles communication between the client & enterprise tier-
- i) Java based and served on a J2EE web application server such as weblogic.
- ii) .Net-based and served on IIS SERVER.
- c) Enterprise Tier Host business logic, applies security rules, retrieves data from and stores data in the database and serves dynamics content to client.

Its consists of:-

A pool of server process managed by a server manager(Four tier architecture only) Transient Volumes

d) Resource Tier - This layer stores persistent metadata and files managed by

Teamcenter. It contains-

Database Server and database

Standard Volumes

For more information, please PM @ChandanKumarGupta

#### @Chandan Gupta • 22 Nov, 2016

satabdiplm

Hi Sir,

What are the advantages and disadvantages of using 2T/4T? And which tier is recommended to be used more? Thanks in advance..

Hi Satbdiplm,

Hope you are well!

Right now I have switch data to my teamcenter website(teamcenterinterview.in) and many article and discussion forum is there. My team will solve the doubt.

Regards,

Chandan Gupta









Members

Add some of the tricky question answer with example in team enter modules step by stey

#### @Madhwesh Chittapur • 25 Feb, 2019

Thanks for giving such a fabulous question and answers but not covered all answers

### @Amit Morey • 02 Apr, 2019

What Skills Does a Teamcenter administrator need?

### @Ankita Katdare • 02 Apr, 2019 • 2 likes

## **@Amit Morey**

If it's Database administration, you need to know about: Oracle or DB2 or SQL Server. If it's Data Model administration, you need to know about: using the BMIDE, basics of XML, object oriented modeling. It fairly depends on the job.

Does that answer your question? If not, you may ask further.

### @Abhitosh Khelge • 03 Apr, 2019

More questions about structure manager?

#### @Ankita Katdare • 03 May, 2019

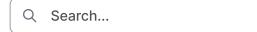
**Some Team Center Structure Manager Interview Questions.** 

What is the use of CCDM in structure manager?

What is meant by Pack and Unpack in structure manager?

Mhat is the Calit Ossurrance?







Classic Variants

Audit log file

Addition, edit or remove Increment Change

Variant data condition

Assign variability of product

What is Multi-Structure Manager?

What is Nonspatial searches?

Which properties are used in Product structure?

What is the Closure rule in Structure manager?









Hi sir,

what are the basic concepts and interview Questions with answers should know before going to Attend Interview as a fresher design engineer job using Teamcenter, thanks in advance sir.

## @Vallala Annapurna • 12 Dec, 2019 • 2 likes

Questions from T

eamcenter admin and installation of 2 tier and 4 tier...?

#### @Ankita Katdare • 16 Dec, 2019 • 1 like

- @Vallala Here are some questions regarding TeamCenter Admin and 2-tier and 4-tier that may be asked:
- 1) What's the difference between 2T and 4T configurations?
- 2) Which one has a better configuration 2-Tier or 4-Tier? Why is it so?
- 3) What do you mean by clear locks functionality?
- 4) What is transient volume used for?
- 5) How does FSC and FCC work?
- 6) What's the logs location for 2 Tier and 4 Tier?
- 7) What does the backup\_xmlinfo utility do?
- 8) How do you prevent users or external processes from connecting to TC, during maintenance periods?
- 9) Where is the license server information available?
- 10) How do you deploy a custom template to the DB?
- 11) How do you clear user preferences?
- 12) What are the utilities that we got to run when there is a Schema change?
- 13) What do you know about generate\_metadata\_cache utility? What is this used for?
- 14) How do you manually start FCC if it's not started?
- 15) How do you resolve if users are not able to create Datasets in TC after setting up a new site?

I think this will give you a fair idea of what kind of questions may be asked.



23.1k views

## **Related Posts**



Q Search



4 amb an

Channels Members

@Ankita Katdare · Jun 27, 2012

Here is a list of seminar ideas for Marine Engineering students. Students belonging to third year or final year can use these seminar topics. This list has been complied after...



11k views

Read More →





## Why we need Virtual memory?

@Sahithi Pallavi · Nov 16, 2009

Today my sir asked this question in the class..! No one gave the correct answer for this question..! What is the need to use Virtual Memory? Why dont we...



3.7k views

Read More →

**Archives** □



## What is the Use of Propeller Shaft?

@ArunSrinivassan · Feb 3, 2012

What is the use of Propeller Shaft in each and every vehicle and also plz tell me what is the difference between Front Wheel, Rear Wheel and Four Wheel...



10.6k views

Read More →

**Archives** ☑



## **Mechanical Engineer starting career in IT field**

@Deadman · Apr 27, 2015

I have posted this query many times but didn't get any expert advice i expected. I am a mechanical engineer and will be leaving my job from next month. Job...



5.7k views

Read More →







Members

https://www.crazyengineers.com/threads/teamcenter-plm-interview-questions-and-answers.90619

## **Toughest Subjects In Mechanical Engineering?**

@Ulkeora · Jul 14, 2013

Hey everyone, I am currently doing my BE in mechanical stream. As I will be entering core from this year, I would like to know what all subjects I will...



11.9k views

Read More →



Q Search



Members