

FaithPLM Solutions

Simplifying complex enterprise...



India's Leading hydraulic turbines manufacturer upgrades Teamcenter Express 3.0 to Teamcenter Express 5.3

About Client

Our client is a full line supplier of small hydro power plants. One of the Leading manufacturer of hydraulic turbines and turnkey supplier of mechanical packages for hydro power projects. Manufacturer of full range of valves with multiple JV and globally recognized player.

Business Challenge

Implementation of enterprise applications within organization is tough task and maintaining those systems is even tougher. System performance and site stability are some of the major concerns for all the existing PLM sites and thus require a highly experience and professional team to let the system work at its threshold. At the same time introduction to new solutions within existing system are always welcomed for process improvement and in turn improves business.

Customer realized the importance of sustainable and long term solution which will map business process efficiently and effectively at the same time it will cater user concerns and rectify them. Need of Stable site and high performance lead customer to upgrade Teamcenter Express from 3.0 to 5.3. Considering the complexity of upgrade project, multiple vendors were evaluated and finally it chooses FaithPLM as Teamcenter implementation/upgrade partner.

Some of the business challenges were

- High Performance PLM System
- High Site Stability
- Streamlining existing mapped business processes in Teamcenter
- Implementing new solutions
- PLM-CAD Synchronization
- Collaboration and Communication
- BOM enhancements and reports
- Continuous Support

Solution

While involved in this engagement we delivered following solutions

- **Teamcenter Upgrade Process**

Most complex task in the project was to upgrade Teamcenter Express from 3.0 to 5.3. With already created data and metadata, it was one of the most complex task to rectify schema collision and data model errors. Such was the criticality of the upgrade path that it needed manually configured schema files to proceed further. With the numerous dry runs on test servers and extensive smoke tests we did Teamcenter upgrade on production server without any obstacle.
- **Enhanced Design Process**

After successful Teamcenter upgrade as a part of new features we designed enhanced part release process to take collaborative decisions with seamless communication. Several improvements were implemented in their existing workflow processes so as to leverage maximum benefits out of the system. Custom workflow handlers were written to perform specific operations which were not available OOTB.

- **Project Id Smart Coding**

Customer needed a different Item ID naming convention based on the various criteria selected by user to classify data, maintain its uniqueness and for many others reasons. With the existing smart coding functionality we implemented smart coding as per customer's project codes.
- **PLM-CAD data Synchronization**

With the availability of existing attribute mapping functionality we achieved PLM-CAD data synchronization for SolidEdge and Teamcenter very effectively and efficiently. We used attribute mapping extensively to print part specific data on drawing such as author, drawing reviewer, approver etc.
- **Teamcenter Client for External Stakeholders**

Using existing Teamcenter client for Microsoft office functionality we implemented Teamcenter client for external stake holders so as to take specific data from Teamcenter Vault and disseminate the same to vendors and partners. Appropriate security accesses were in place for such users. Also Teamcenter thin client was deployed so as to involve management in important decision makings. Workflow outlook integration was done for users to complete their tasks through office client.
- **Data Security**

Solution was designed while putting valid access privileges at various stages across the process so to ensure the data security at each stage of the process. Detailed auditing set and made available to administrators.
- **Customization & legacy code migration**

Most of the project tasks were completed using configuration and codeless customization but at the same time there are some customization tasks done for specific functionality to work. Also customer's legacy code migrated.
- **BOM Enhancements and reports**

Solution designed using custom code to add runtime property to hold material and weight of each of the part within the assembly which would be displayed in structure manager and publish the same within workflow to other departments.

Process Template **Part Release Process** | Template Type Process Task

Part Release Process

- Check for PART is Assembly Type
 - IR has BVR?
 - PART BVR
 - New Or Task 1
- Check Part Status
 - Check Status
 - PART has a Status
 - PART has no Status
 - Join 1
- Check for SE Dataset Attached
 - Dataset Check
 - No Valid SE Dataset Attached
 - SE Dataset Correctly Attached
 - Join
- Initial Part Review
 - Check if any failure
 - Error Occured in Workflow
 - Initial Review by Reviewer
 - Add Status
 - Join
- Part Release Review
 - Check for Failure Form
 - Error Occured in Workflow
 - Final Review
 - Create Updated PDF
 - Add Status
 - Join

Part/Assembly Number	Part Name	Owner	Release Status	Quantity	End Hurd Material	Weight (Kg)
000118/B	000115/A	Main Assembly	saniket (user1) BL		Aluminium	70.75
	000110/B	SUB Assembly 1	saniket (user1) BL	1	10 Aluminium	6.7
	000121/A	PART 1	saniket (user1) BL	10	Steel	2.3
	000121/A	PART 2	saniket (user1) BLJob1	2	20 Plastic	4.4
	000116/A	SUB Assembly 2	saniket (user1) BL	20	Aluminium	27.55
	000274/A	SUB Assembly Level 2	saniket (user1) BLJob1	8	10 Aluminium	19.95
	000175/A	PART 3	saniket (user1) BLJob1	5	10 Iron	7.6
	000176/A	PART 4	saniket (user1) BLJob1	5	20 Iron	12.35
	000175/A	PART 5	saniket (user1) BLJob1	5	10 Iron	7.6
	000117/A	SUB Assembly 3	saniket (user1) BLJob1	2	10 Steel	6.2
	000123/A	PART 6	saniket (user1) BL	2	20 Steel	4.2
	000120/A	PART 7	saniket (user1) BL	2	40 Aluminium	1.6
	000124/A	PART 8	saniket (user1) BL	1	50 Steel	0.1
	000177/A	SUB Assembly 4	saniket (user1) BL	60	Steel	26.1
	000278/A	SUB-ASMA 1	saniket (user1) BL	10	Steel	17.6
	000179/A	PART 9	saniket (user1) BL	10	Steel	9.1
	000180/A	PART 10	saniket (user1) BLJob1	20	Steel	8.5
	000180/A	PART 10	saniket (user1) BLJob1	20	Steel	8.5

New Item

Compose the item ID according to the rules.

Item ID: FL350002360

Assembly Type: BA (component part)

Valve Type: B-Type

Number: FL350002

Valve Dimension: 2

Fluid Temp: 360

Teacenter Tasks to Perform

Subject: 000118/A/1-TEST DRAFT (perform-signoffs)

Start date: None | Status: Not Started

Due date: None | Priority: Normal | % Complete: 0%

Reminders: None

perform-signoffs

Process Name: 000118/A/1-TEST DRAFT

User	Decision	Comments	Date
saniket (user1)	No		
Engineering_Express_Organization/Checker	Decision		
Shallesh (user2)	No		
Engineering_Express_Organization/Manager/Decision			

File Name	Owner	Type	Size	Last Modified Date
000118/A/1-TEST DRAFT	user1	ItemRevision		12/24/2009 12:21:07 PM

Result

Based on the solutions we provided, our client now has a solid foundation to align its PLM vision in accordance with the business process and thus leveraging maximum benefits out of it. These Solutions helped our client on various fronts:

- Introduction to improved and new features
- Bugs correction encountered in prior versions
- Establish suitable design practices
- Ensure collaborative decision making while reviewing design data.
- Involve all the stake holders before releasing design data to avoid design conflicts / assembly-line surprises.
- Unified communication platform to put all the stakeholders at each stage of the process
- BOM enhancements to disseminate information.

Why FaithPLM Solutions?

The project complexity itself chooses FaithPLM as its implementation partner. With multiple failures of vendor evaluation Customer found FaithPLM Solutions and was delighted to see the end results.

Our deep-set commitment to our customers defines how we do business. Our customer centric engagement model enables our customer to meet their business goal effectively and efficiently. With the strong functional expertise and solution designers we've enabled our customers We support customer's business goals and offer continuous services/support based on the requirement. Whatever customer's business needs, we have the in-depth knowledge, processes, tools and relationship-based approach to put the right solution in right place at right time.

FaithPLM Solutions

Flat no. 106, Shitole Empire
Famous Square, New Sangvi
Pune-411027
Maharashtra
India
Ph: +91-020-65000685
www.faithplm.com