



TEK07241 (PTC - Windchill - 5 + Year)

Highlights

Overall, 5 years of experience with 4 years of PTC Windchill Development/Customization Experience and 1 years into Application Operations such as designing, automating and microservice deployments in AWS, leveraging management, CI/CD, Docker, Jenkins, and DevOps processes

Skills

Primary Skills

- BOM Management
- CAD Management
- Change Management
- Configuration Management
- Windchill Customization

Secondary Skills

- Windchill Business Admin

Other Skills

- **Windchill Customization:** Actions Framework, Table Builders, Data Utilities, Wizards, Validators, Form processors, Filters, Listeners, Workflows, QuerySpecs, Windchill Tag Libs.
- **Windchill Business Administration:** Lifecycle, Workflow customizations, OIRs, ACLs, Types and Attributes Management, Loaders, Queues, Uses, Profiles, Products/Libraries.
- **Cloud & SaaS Platforms:** AWS
- **DevOps Tools:** Eclipse, Jenkins, Terraform, Docker, AWS
- **Cloud Services:** EC2, S3, EBS, RDS, ECS, VPC, CloudWatch, CloudTrail, IAM, AMI, ASG, ELB, SQS, Lambda.
- **Databases:** MS SQL, Oracle, SQL Developer
- **Operating System:** RHEL, Ubuntu, Windows
- **Monitoring Tools:** AWS Cloud Watch, AppDynamics, Windchill SMJ Console
- **Ticketing Tools:** Manage Engine, Service now
- **Version Control Tool:** GitHub, GIT

Projects

Windchill Customization Major and Minor Enhancements - Manufacturing Industry (24 months)

Worked on various Windchill user stories using JIRA/Agile methodology such as:

1. Updating/Creating custom event listeners and handlers.
2. Worked on creating several custom actions and models.
3. Developing/Customizing Form Processors to process wizard form data.
4. Writing various PreSelect, PostSelect and PostSubmit validators.
5. Using filters on custom actions to hide/enable/disable certain actions based on logic.
6. Creating/Using custom/OOTB Datautilities such as context, users, revision pickers.
7. Developing JCA tables and Table Builders to render MBAs/IBAs/GUI components as columns
8. Customizing existing workflows related to Part/Doc release process to include synchronize, expression robots based on the requirements.
9. Modifying existing tools to create/update Windchill Objects and its attributes.
10. Creating and loading custom file-based versioning schemes, numbering sequences.
11. Creating loader files to load parts, documents with contents, access permissions etc

Windchill SOAP Webservice – Documents and Contents - Manufacturing Industry (6 months)

Description :

- Third Party Application (Home Grown) to send the request to the webservice deployed in Windchill
- Request to contain the document number of Windchill
- The SOAP Webservice to prepare the response containing the below information:
 - Document Structure (only child's document numbers)
 - Send failure status in case document structure contains cyclic reference
 - The primary content of the requested document (Root) if the document's state is released.
 - Authentication mechanism used: HTTPServer Authentication.

Windchill QML Reports and Webservices for Azure Data Lake - Manufacturing Industry (6 months)

Requirement: Developing QML Reports and Webservices for Azure Datalake

Description: In this project, the ask was to write data reports in Windchill that would be called by Azure Data Lake Services:

- Deployed SOAP Webservice that would take Parent Part Number and Plant View as input from the Azure Data Lake service and would send back the entire BOM structure with WTPartUsageLink attribute information as a response.
- Developed multiple Java Based QML Report to send back below data to DataLake service:
- Product's Change Information along with other calculated columns such as count of resulting items, each resulting items related objects count etc
- For a time period, change object information ? CR|CN|CA|Resulting Objects

Windchill Reference Parts - Manufacturing Industry (6 months)

Requirement: Customer wanted a custom link between WTParts, all these links should get published to their custom database tables across various 3rd party applications containing the nature of link between two WTParts.

Description:

- Configurable custom master link between PartMaster-to-PartMaster object with an IBA on this link that denotes the type of link.
- Two custom JCA table for ROLEA (Reference For) and ROLEB (Referenced By) objects.
- Toolbar actions for Add, Update, delete, download, push and upload from spread sheet.
- Each utility like, add, edit etc. contains two steps wizard.
 - Add: To create new relationship.
 - Edit: To edit the details such as comments and other IBAs without iterating the objects.
 - Delete: Will de-link the two parts, by updating the MARKFORDELETEA2 to 1 in ConfigurableMastersLink table.
 - Download: Downloads the table contents to file(xls , txt etc.)
 - Upload: An input file containing source and target parts can be used to create/update existing relations.
 - PUSH: This action will publish the selected relation to the 3rd party app via Webservice.

My Tasks: ADD: Implemented the add action using, context picker, JCA table, JCA step wizards, form processors, Datautilities and table builders

Windchill Info*Engine Reporting - Manufacturing Industry (6 months)

Requirement: Developing Info*Engine Reports – CAD, Change to Resulting Items Reports

Description: Developed tasks and delegates to generate reports for following scenarios:

- For given products get the CAD Parts and related WTPart attribute information.
- For multiple CN inputs, get CN?CA?Resulting item details
- For multiple WTPart inputs, get all plant view Part structure information fully exploded including information such as:
 - Part Number|Child Part Number| Child Part Level| CR|CN|CA

Non Windchill Operations and Support (12 months)

- Implemented CI/CD pipeline for application deployment using tools like Git, GitHub, Maven, Jenkins, Docker.
- Managing policies for S3 buckets and utilizing S3 Buckets and Glacier for storage backup in AWS by creating S3 buckets.
- Migrating and managing multiple applications from On-Premises to Cloud using AWS services like S3, Glacier, EC2, RDS, Cloud Formation, VPC.
- Reviewing & monitoring services for AWS cloud resources and the applications running on AWS using Cloud Watch, automating actions to monitor for better understanding and operations of system.
- Setting up Linux and Windows servers on Amazon (EC2, EBS, ELB, SSL, Security Groups, RDS and IAM).
- Interacting with clients, providing cloud support, and making recommendations based on client needs.
- Developing and maintaining cloud solutions in accordance with the best practices.
- Configuring the Backup for EC2 servers and RDS and restoration check in AWS and Azure.
- Experience in Handling Security Market Release- Security patch updates for Windows, Ubuntu, and Linux servers.
- Experience in designing cloud security VPC, Network Security, VPC peering, VPN, MFA.
- Achieving zero downtime deployment and patch updates with rolling bounce activity.
- Rich exposure of performing configurations & infrastructure management with tools

like Terraform and troubleshooting SaaS application deployment procedures,
Deployed application using CI/CD.

- Achieving the deployment with zero downtime by performing the Rolling bouncing for EC2 auto scaling servers.