



MICROGENESIS

Bridging the Gap

MicroGenesis Integration
Adapter for PTC CodeBeamer
and IBM ELM





Problem Statement:

In today's dynamic engineering ecosystem, many organizations leverage both IBM Engineering Lifecycle Management (ELM) and PTC CodeBeamer to manage their engineering data efficiently. However, the lack of a direct integration between these tools creates a traceability gap, making it difficult to establish seamless relationships between engineering artifacts across platforms.

Common Usage Scenarios

The utilization of these tools varies based on team structures and project needs:

1.

Teams such as New Product Development (NPD) or Marketing may use PTC CodeBeamer to define high-level requirements, while Project, R&D, or Product teams could rely on IBM ELM for detailed requirement management and for capturing other engineering artifacts. Alternatively, IBM ELM may be used for high-level requirements, with CodeBeamer managing the detailed engineering aspects.

2.

Some organizations could use IBM ELM exclusively for requirements management, while CodeBeamer handles other critical engineering functions such as test management, task management, change requests, defect tracking, and more.

This distributed approach necessitates a robust integration to ensure seamless collaboration, traceability, and data consistency across both platforms.

The Gap in Existing Solutions

Currently, no direct integration exists between IBM ELM and PTC CodeBeamer that allows for seamless linking of artifacts residing in this application. While some synchronization tools can copy data from one system to another, they come with significant drawbacks:



Data Duplication – Synchronization leads to redundant data across platforms, increasing storage costs



Loss of Metadata – Key elements such as history, comments, and system attributes are not transferred effectively.



Administrative Overhead – When data is duplicated from one application to another, defining and managing roles and permissions for the duplicated data in the destination application adds additional complexity.



Synchronization Limitations – The data sync might not be real-time, leading to potential inconsistencies between the two systems. On the other hand, if real-time synchronization is enforced, it could cause performance issues due to the constant data exchange.

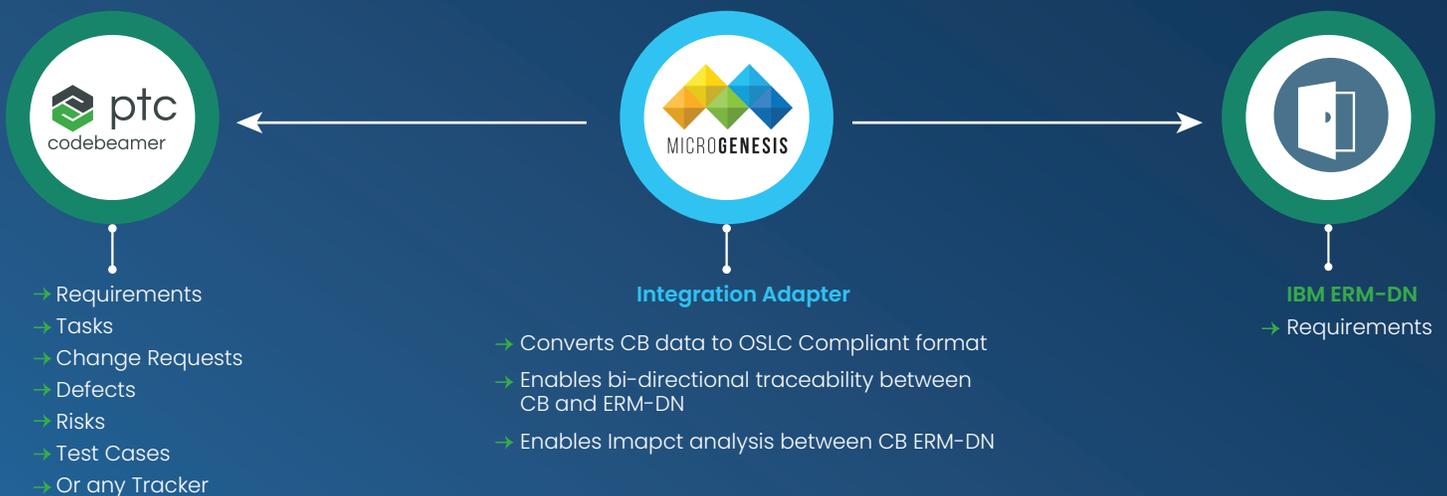


Compliance Risks – For industries with strict regulatory requirements (e.g., automotive, aerospace, medical devices), the inability to maintain end-to-end traceability across tools could lead to compliance violations and audit challenges.

Most users agree that an OSLC-based integration would be the ideal approach, enabling live traceability without duplication.

The MicroGenesis Solution

To address this need, MicroGenesis has developed an OSLC-based integration adapter that enables seamless linking between IBM DOORS Next (DNG) and PTC CodeBeamer without data duplication.



Key Benefits of the Integration Adapter



True OSLC-Based Linking –

Our adapter converts CodeBeamer data to be OSLC-compliant, enabling a native OSLC integration with IBM ELM.



No Data Duplication –

Unlike synchronizers, this adapter links requirements directly instead of copying data across tools.



Impact Analysis Support –

Teams can assess changes across linked artifacts, improving decision-making and risk management.

By enabling live, bidirectional traceability, this adapter enhances collaboration, reduces redundancy, and ensures a single source of truth across IBM ELM and PTC CodeBeamer.

With this innovative integration, engineering teams can maintain consistency, improve efficiency, and achieve a connected ALM ecosystem—without compromising data integrity.



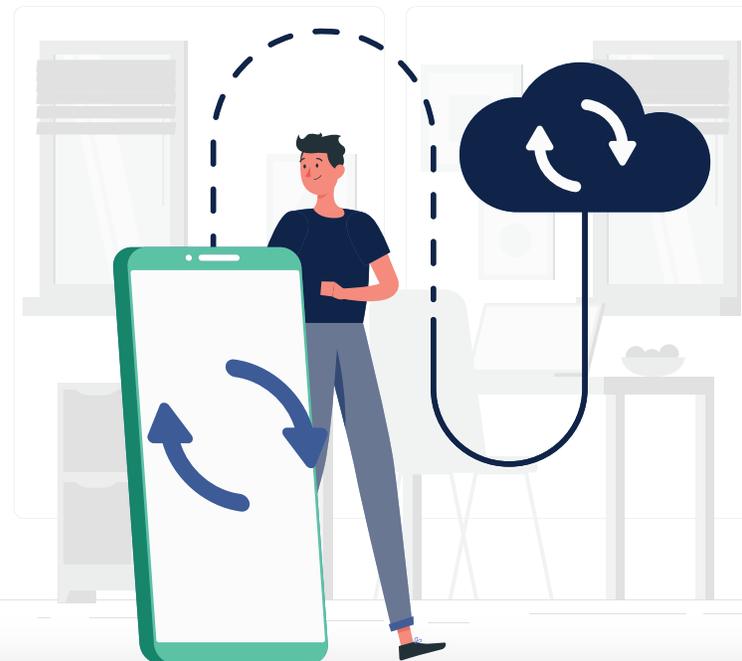
Seamless Navigation –

Users can click a link in one tool and be redirected to the corresponding requirement in the other tool.



Delegated UI –

When users hover over a link, essential data is displayed without needing to switch applications.



Contact Us

For organizations looking to enhance their IT infrastructure and achieve similar benefits, contact us to learn how we can assist with your cloud migration and IT transformation needs. Let us help you drive innovation and operational excellence in your business.