Upgrade Concerns

Scenarios of Upgrade

Source	Target	Effort and Work Involved
Base	Base	
Extended	Base	
Extended	Extended	
Customization	Base	
Customization	Extended	
Customization	Customization	
Platform + Apps	Upgrade Platform Only	

Here's a detailed breakdown of the **Upgrade Process** steps, including **Scenarios of Upgrade**, **Effort, and Work Involved**, and **Common Issues** during upgrades:

Steps Involved in the Upgrade Process

1. **Preparation and Discovery:**

   - Collaborate with stakeholders to define the upgrade scope, strategies, and expectations.

2. **Instance Setup and Upgrade:**

   - Recreate and prepare existing instances for the upgrade. Ensure that the environment meets the prerequisites for a smooth transition.

3. **Testing and Validation:**

   - Conduct thorough testing to maintain functionality, performance, and data integrity post upgrade.

4. **User Acceptance and Support:**

   - Facilitate **User Acceptance Testing (UAT)**, addressing any issues raised and providing support during this phase to ensure users are comfortable with the new system.

5. **Production Deployment:**

   - Provision new instances, apply the upgrade, and transition them to live production environments.

6. **Transition and Decommissioning:**

   - Provide post-go-live support, monitor system stability, and decommission older environments for efficiency.

Scenarios of Upgrade

1. **Source and Target Combinations**:

   - **Base to Base, Extended to Base, Extended to Extended**: This group handles core system updates, applying basic configurations across the system.

2. **Customization to Base, Extended, and Customization**:

   - Tailored approaches incorporate existing customizations into the new system, ensuring compatibility with upgrade changes.

3. **Platform + Apps: Upgrade Platform Only**:

   - Focus solely on upgrading the platform, leaving the applications untouched but ensuring compatibility post-upgrade.

Effort and Work Involved

1. **Effort Classification**:

   - **Low Effort**: Takes around 2-5 weeks, typically involving minor updates or platform patches with minimal risk.

   - **Medium Effort**: Requires 4-8 weeks, usually involving comprehensive regression testing, new features, and more complex upgrade paths.

2. **Key Tools**:

   - **Upgrade Automation Tools**: Automate tasks such as testing, data transformation, and analysis. AI-based tools can help optimize transformations and flag inconsistencies.

Common Issues in Upgrade

1. **Complications and Errors**:

   - **Invalid object compilations**, platform code changes, or database access errors can arise, often requiring manual interventions.

2. **Code and Configuration Issues**:

   - Errors related to code merges or improperly applied patches may complicate upgrades, leading to potential system instability.

3. **Infrastructure Challenges**:

   - Service interruptions, such as Kafka or Tomcat not running, may cause upgrade failures, underscoring the importance of infrastructure readiness.

By following these structured steps and being aware of the common issues that arise, the upgrade process can be made more efficient and predictable, reducing downtime and improving post-upgrade performance.