Ace Your SAP Change and Release Cycles

At KTern.Al, We strive the best to democratize SAP Digital
Transformations, this is one such publication where we have
gathered all the knowledge of some of best minds in SAP to create
"Ace Your SAP Change and Release Cycles - Playbook"

We are delighted that you have downloaded this Ebook today, Enjoy!







Why did we create this eBook?

One of the main reasons that this eBook became a reality is to help the SAP community deal with the changes in their SAP landscape. Release management has always been a topic of concern in most SAP Landscapes. If done in a controlled way they can be great for the business in question, but if everything doesn't fall in place, all that would remain is Carnage!!

If uncontrolled changes make it to the production in the form of transport requests they can destabilize the entire setup of configuration and customizations in the SAP landscape in question. Also, Issue management becomes hopeless.

The eBook spans across 4 Chapters each carefully built with SAP Change as prime focus



Understanding SAP Releases

Covers about different terms and definitions during SAP Change and Releases



SAP Release Strategy

Details out how an ideal SAP
Release Strategy can be planned
and its components



People of SAP Releases

Covers different roles and people involved in an SAP Release



Acing your SAP Release

Focuses on How you can ace your SAP Release with different tools and strategies





Understanding SAP Releases and Definitions

If it is working, don't touch it
Anonymous

A Standardized approach to the SAP Releases would always save the day for everyone involved in the release and the change. But sadly, that's not the case in most of the responses we received as per the study we conducted. One of the major revelations would be the understanding of various change needs and release types amongst everyone involved in the landscape.

An Enterprise's release strategy decides the lifeline of the entire business stability. Any weakness in the transport pipeline and the release management could impact the business operations.

It becomes obvious that these changes need to be handled right and managed. To do so, you may need to understand the nature of these changes that happen in your system. This may include internal code changes as part of your customizations, standard object modifications, and data changes. The Release Management process becomes easier when the nature of a change is known.

What is SAP Change?

Anything that alters the current behaviour of the system can be considered as 'Change'.

Changes can be called the building blocks of any release. These changes together constitute a release and the nature of it determines the approach and method towards controlling the entire release cycle





Types of SAP Change

Major Change

These changes are the most disruptive ones that alter the functionality of the system. These could include significant functionalities or changes that could impact multiple parts of the system. A need for a major change usually happens because of any of the below:

- Release of New Application
- Introduction of a new line of business
- Changes to existing business processes
- Changes in the business model
- Application upgrades (eg. S/4HANA Migration or FPS Upgrades)

Operational Change

These are catered to the non-emergency, but progressive changes required in the system. They are a simple collection of changes that could affect multiple lines of business more in the view of continuous improvement and optimization. Most of these changes are mostly because of:

- Business As Usual Changes
- Need for Governance and Compliance
- Need to keep the system up to date





Types of SAP Change

Minor Change

These are focused changes intended for a single SAP Module or line of business that needs a fix or an enhancement. Most of these changes wouldn't need full-blown regression testing but localized. These primarily focus on:

- Changes in Customizing Data. (Eg. Creation of a Sales Organization)
- Configuration updates
- Workbench Changes (changes to WRICEF Objects)
- Authorization updates

I call these, the most notorious ones. Being a developer, we call them, hotfixes. (They come in too hot 66). They are time-critical, need an immediate fix, and are a nightmare. They occur usually because of a bug found in the production that requires an immediate fix.

Most Change / Release Managers would not have an emergency fix going into the production because of its nature.





Types of SAP Releases

Major Releases

The release windows which are basically planned and intended to cause a major disruption. It could be an introduction of new functionality or a change in the existing business process or a country go-live.

These are significantly longer release windows which would involve extensive planning, approach, End User Testing, Training, Change Management, Process Updates, Documentations. They go by strict timeline and release dates. The scope for improvements or changes to the release usually goes through a steering committee or Change Approval Board

Minor Releases

Minor Releases are relatively simple and are short in nature. The Release cycles are intended for incident fixes and functional enhancements in a system. These usually follow a major release and progressive updates happen to the newly introduced functionality.

These are relatively shorter and would span may be from 4–8 weeks. Because of their relatively smaller release window, they may not have a dedicated change management team or regression testing or training update.

Some of the characteristics of a change inside a minor release would be:

- 1. They are local changes
- 2. The development effort would not go beyond 100 hours
- 3. End User Testing is minimal
- 4. Training may not be required



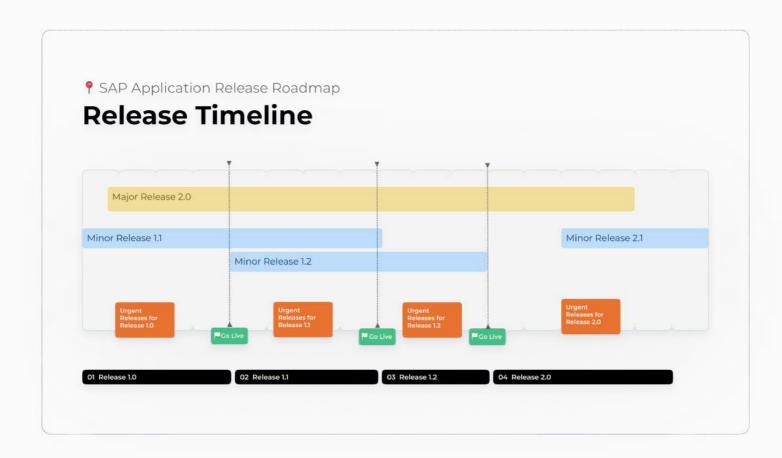


Types of SAP Releases

Emergency Releases

Emergency releases will always be regarded as a necessity. An emergency fix may require an emergency release into the system, usually because of an incident in the business. The release is an unplanned, imminent and usually would not be part of a release calendar. It is always suggested to reduce the number of emergency releases in an SAP system.

If you are dealing with numerous hot fixes in your production, it is high time you look into release management. The reason to avoid emergency release goes without saying, they are unplanned. The testing or the training is not considered. These are notorious in nature and could disrupt the production operations and deal great damage to existing business processes







Questions to ask before a release

Questions to ask before a Release
Will this change cause a system outrage?
Will this change need end-to-end regression testing?
Are the end-users significantly affected by the change?
Is this a critical business change?
Can this change wait until the next release window?
Would there be a need for end-user training?
Is a major process failing without this change?
Can the business plan a workaround?
Are there any financial impacts of delaying this release?





Change Management Strategy and Planning

The release manager will own, maintain, define the annual release schedule. These will be published based on the release cycles maintained. The backlog of the release, (Release Backlog) would usually be based on the strategic planning team and the application management team. The schedule will be broken into multiple release windows with clear conjunction from the stakeholders involved.

The plan will be published to the business in order to plan their commitment to the end-user testing and the Training. It is critical that the business and the IT are on the same page for a release schedule and understand the implications of the same. The business might also need to be open and plan for the total system outrage during the release window, restricted usage of the system.

Release Planning

The Release Plan is a detailed plan on the release schedule. The Release Plan would define the dates for Key Activities and critical cutoff dates within each release. In General, we recommend adopting the **activate methodology** for performing release that would allow phased approach on the entire release timeline. Each phase of the activate would help plan the release more effectively.

But more over, Activate based release plan is applicable only for major releases. There are certain key components to be included in a release plan, they can be called milestones.

- 1. Release Scope
- 2. Sprint Planning
- 3. Unit Testing
- 4. End-user testing
- 5. Regressing testing
- 6. Release cutover





Components of a Release Plan



Release Scope

The Release scope would involve freezing of the changes in the release to be considered. The proposed scope of the release need a review and would require an approval. The Deliverables during the freezing of release scope would involve.

- 1. Release Scope Document
- 2. Release Backlog
- 3. Scope List Definitions
- 4. Functional Specification documents
- 5. Master Data Requirement Specifications
- 6. Budget Approval





Sprint Planning

Each Release could involve multiple sprint iterations based on the release window. Each sprint would run for not more than 2 weeks. The overall development activities happen during this phase.

- 1. Sprint Planning Document
- 2. Sprint Backlog
- 3. Technical Specification Documents
- 4. Unit Testing Scripts
- 5. Transport Request Backlog

End User Testing

The End user Testing would be the critical step to the release and would involve extensive testing by the consultants and the business users. The end deliverables would include:

- 1. Unit test script results
- 2. End User Testing Results
- 3. End User Sign off Documents
- 4. End User Testing Scripts
- 5. End User Training documents
- 6. Issue Backlog
- 7. Knowledge Transfer document

Regression Testing & Cutover

Once signed off, the release team plans for the regression testing and the production cutover. The overall regression testing cycle depends on the testing coverage and the size of the overall release. This is a crucial step in the overall success of the release and would involve almost all of the stakeholders.

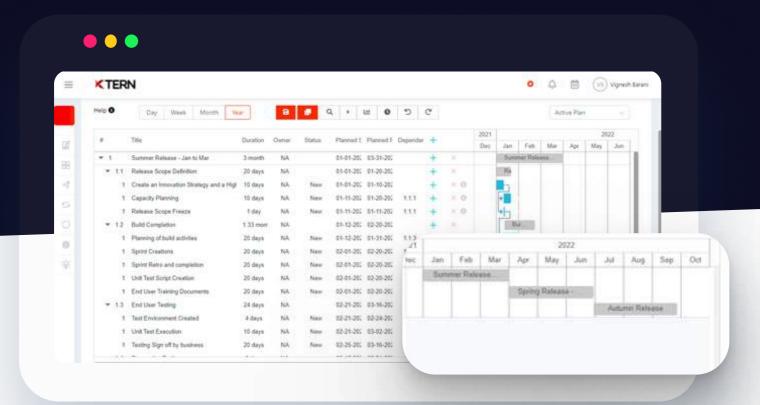




- 1. Regression scripts document
- 2. Regression results sign off
- 3. Training to End Users
- 4. Change Management
- 5. Quality Gate Approval
- 6. Migration of Transports

MODEL PROJECT

Release Management handled with the Release Intelligence Platform, KTern.Al







People in SAP Change and Relases

The success of SAP Change and Releases vests upon Process, People and tools. With us covering on the process of the Releases. This Chapter would involve about the people involved in the SAP releases. The 2 levers of management the entire release would be Release Governance and Communication.

A clearly defined release process would involve multiple teams and roles with dedicated responsibilities







The Release Manager



The Gatekeeper of the Production System

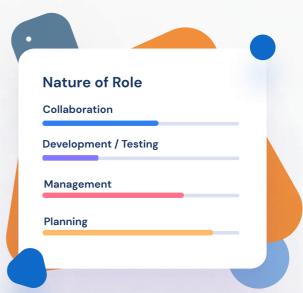
Release manager is very pivotal to the planning and execution of the release management and the governance. The purpose of the release manager would be to plan, manage, govern and co ordinate all the changes to the production environment



Roles and Responsibilities

- Liason to CAB: Commander in chief to the Change Approval board. The board listens to the input from the Release manager
- Collaboration Expert: Holds the IT and Business together
- Gatekeeper of Production: Nothing must be released without the approval of Release

 Manager into the SAP Production System
- Planning Expert: Scopes, Creates, Maintains and Publishes the Release Schedule for the given period.







The Operations Manager



The Scrum Master

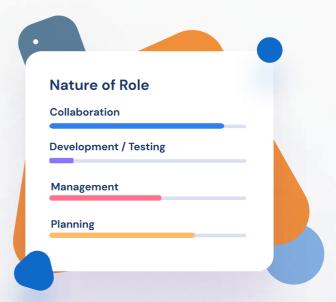
The Project manager or the operations manager ensures the process is adhered and the governance is taken care. The operations managers dons the role of Scrum master for the sprint cycles and makes sure the sprint releases happen on time.



Roles and Responsibilities

- Manager of Sprints: Commander in chief to the Change Approval board. The board listens to the input from the Release manager
- Process Champion : Holds the IT and Business together
- Risk Registry Expert: Nothing must be released without the approval of Release

 Manager into the SAP Production System
- Daily Scrum Hero: Scopes, Creates, Maintains and Publishes the Release Schedule for the given period.







Communication Plan

Communication is key to the success or failure of your SAP Change.

1. Change Approval Board

Purpose

To approve change requests into a Release.

Members

Release Manager, Program Manager

Frequency

Monthly

2. Architecture Board Meeting

Purpose

- Monthly maintenance windows and any expected impact on Project.
- Review of any other upcoming activities which may impact Global Template.

Members

Release Manager

Solution Delivery Manager

Lead Architect

Frequency

Weekly initially moving to Monthly





Communication Plan

Communication is key to the success or failure of your SAP Change.

3. Release Planning

Purpose

To confirm the scope of each Release before it is initiated and to conduct Release forward planning

Members

Release Manager

AMS SDM

Project SDM

Manager Operations

Frequency

Monthly

4. Release Status Meeting

Purpose

To manage the Release through the various phases, checkpoints, environments, and to confirm that all required sign offs are in place.

Members

Release Manager

AMS SDM

Project SDM

Others stakeholders as required (e.g. 3rd parties, Operations, Process Owners, etc.)

Frequency

Weekly

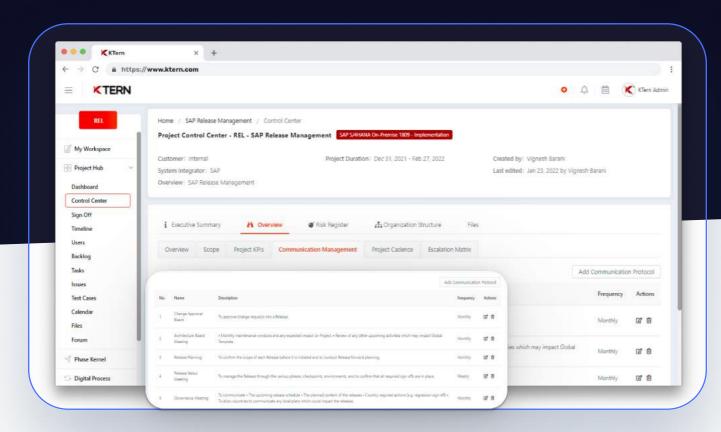




Communication Plan

MODEL PROJECT

Release Management handled with the Release Intelligence Platform, KTern.Al







Approval Board

Once a release scope is defined, the release manager will be responsible to ensure that the milestones and the acceptance criteria are met prior to building. Once the build begins and the transport backlogs are created, the release manager must ensure the regression testing is successful and the impact of the transports are analyzed.

For Major Releases, there could be a project manager involved. To sum it up, Release managers are solely responsible for approval of releasing of transport requests across the release pipeline.

One of key things to note would be to make sure the regression testing happens in a freshly created production copy in order to consider all of the latest configurations or changes in the production system.

CHECKLIST 1: Pre Production Sign Off Checklist

Function Specification Sign	า Off

Technical Specification Sign Off

String testing results Sign Off

End User Testing results Sign Off

Knowledge Transfer Completed





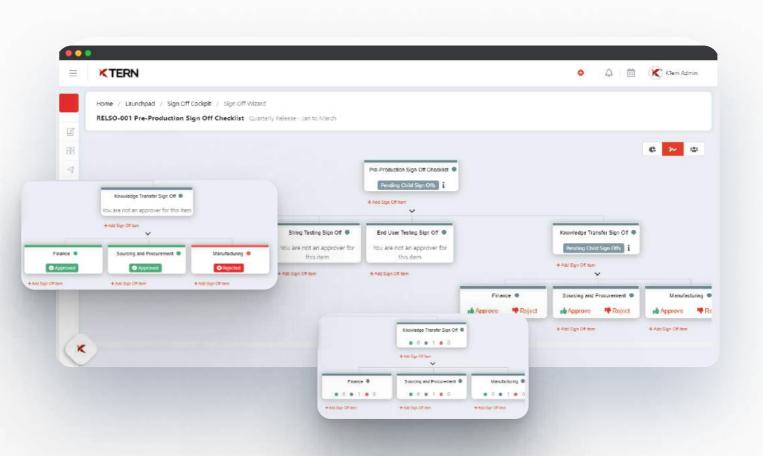




Approval Board

CHECKLIST 2: Production Environment Entry

- Regression Testing Results Sign Off
- Operational Readiness Complete
- Go / No Decision Sign Off
- And you're good to go!







Ace your SAP Change and Release

What can change do to your SAP System?

Any Change in your SAP System can possibly disrupt your landscape and it is important that certain measures are taken to make the change seamless and less disruptive. Modern Enterprises have adopted different tools and platform to mitigate the risk posed by a simple change in the SAP Landscape. Most of the times, any change minor or major are moved intor the production system via SAP Transport Requests

With our understanding on SAP Change and Releases from our previous chapters, let's deep dive into how automation and Process Mining can play a role. We have understood that any change in the SAP Landscape would primarily impact the following: Your Processes, Your Customizations, Your Stakeholders and Your Test Cases.



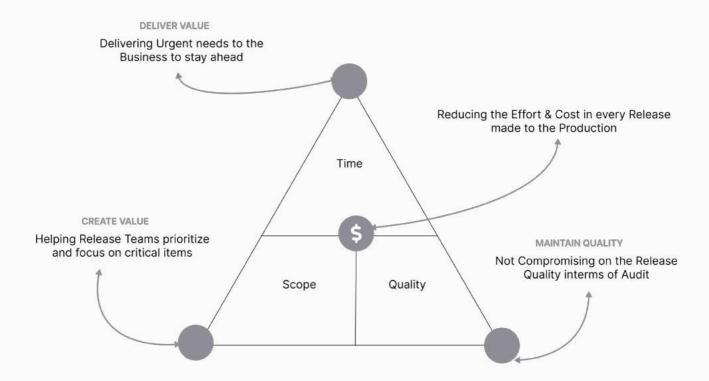




Questions asked during SAP Change

The Effeciency of every release is measured predominantly based on the Time, Scope and Quality. While each is inversely proportional to each other. There's always a constant between the time and the scope while in most cases, the Quality remains constant inorder to remain compliant to the Release Standards.

Larger Release windows would mean larger impact on the business that can put them ahead of the competition but would also mean larger timeline. This could mean any of the emergency fixes that the business wants gets delayed causing productivity issues.

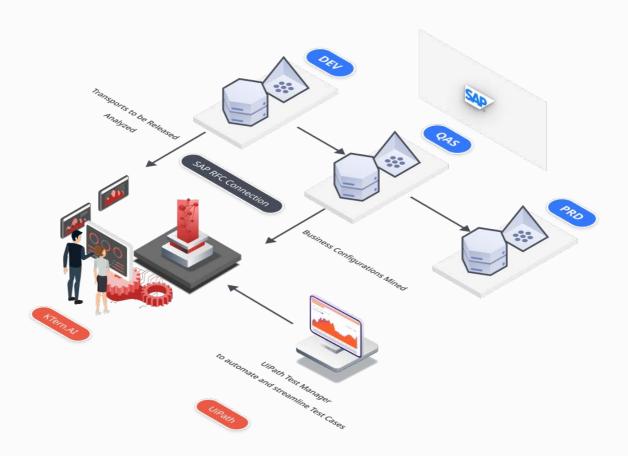






Using Automation to drive SAP Releases

Here's where platforms like KTern.Al and UiPath Test Manager, play a role in the identification of the impact of the release so as to allow release teams to continously focus on the value delivery while the risk mitigate and Quality Assurance is taken by Release Automation Systems. The platform would simply connect to the ERP Landscape and would perform data analysis on the Transport Objects to be released inorder to evolve a Risk Mitigation Dashboard and help avoid the TEST ALL MENTALITY that is a primary cause of delayed releases.



In the above, The platforms would connect via SAP RFC Communications and help in analyzing the impact of the transports on multiple fronts that would help release teams plan better and have complete control on their overall release.





Using Automation to drive SAP Releases

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KTern improves the approach of change impact analysis by decreasing the time of analysis, intelligently managing the test cases, and providing a detailed report on the entire impact analysis.

The stakeholders, the type of business process, and also the possible impacts. KTern aims to automate the entire process of change impact analysis by involving intelligent bots. Them carrying transport requests of the changes or modifications and then providing a detailed report of the impact. Reports on a different process, test cases, predicting and creating possible test cases. The bot handles the transport requests and then analyses the requests. The possible impact it can have, and further implications due to the impact. The Analysis happens across:

- 1. Change Impact Analysis
- 2. Process Impact Analysis
- 3. Object Impact Analysis
- 4. Test Case Impact Analysis

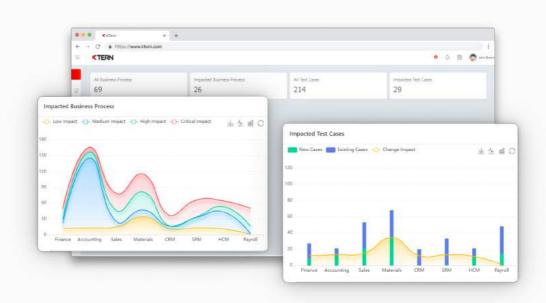






Using Automation to drive SAP Releases

- ✓ Digitized Release Orchestration with everything in one place
- ✓ Controlled Releases with Business / User Satisfaction
- ✓ On Demand Release Analytics on any sets of Transport Objects
- Go / No Go Decisions driven by Data and Business Usage
- ✓ Release Audit and Governance with Clarity of the Testing Scope
- Reduce IT Costs while focusing on cost and Time Reduction





Thank You!

I hope you enjoyed the eBook as much as we enjoyed creating it. Please do check out KTern.Al for more of these and leave us a message if you want to know more

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