

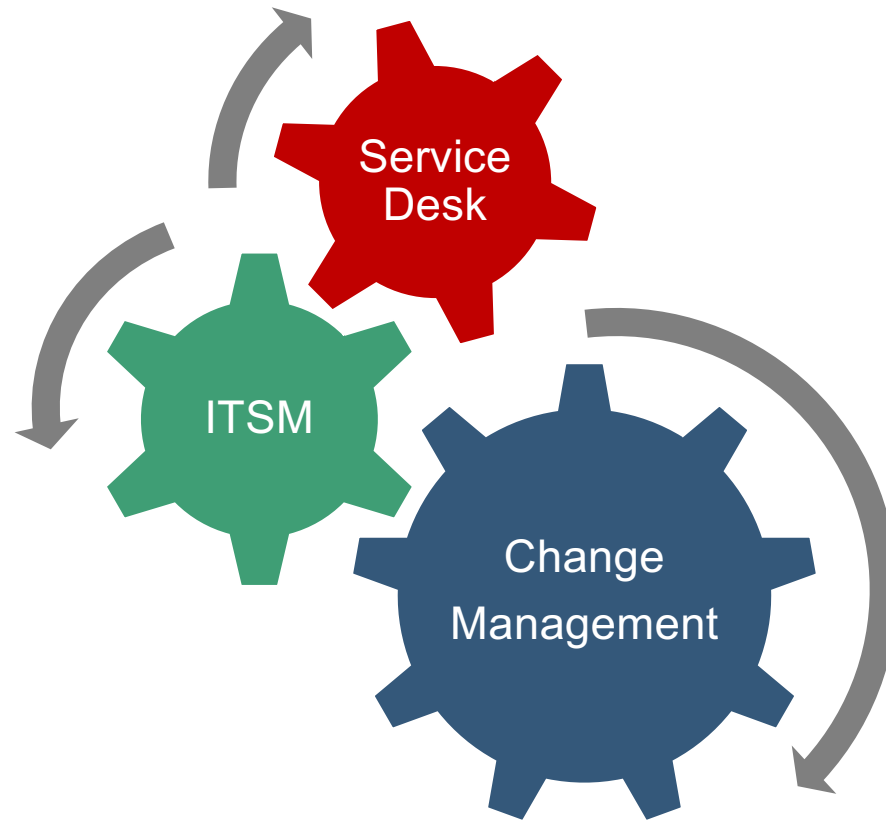


Change Management Automation Implementation

Transition from CHARM to Rev-Trac



SAP Change Request Management

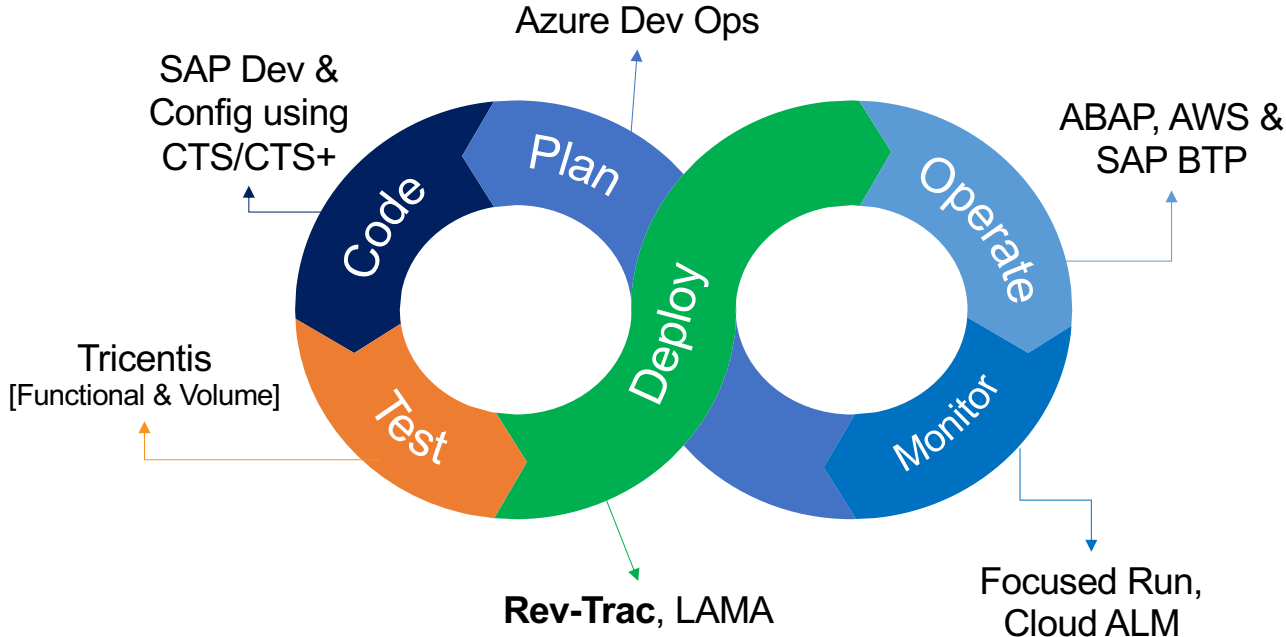


Challenges with CHARM

- Inherent waterfall-based design – no Agile (CI/CD) support - Locks the objects until the objects released\ in Stage
- Insights into significance of Change in terms of Impact\Risk
- Reporting and Alerting Gaps
- Automating our complex cross system dependencies is not feasible
- Visibility of Change is lost over time
- Not able to keep Stage system as close as possible with Production
- Needs customization to track and alert on the Change progression
- Loss of support system as SAP CRM & ITSM got phased out
- BAU & Urgent Change types move with almost same steps and pace as Normal Change



Dev-Ops for SAP



Key Drivers to move from CHARM to Rev-Trac

- **Transformation to DevOps and Agile**
 - Fundamentally, CHARM is built up with waterfall model of delivery. It doesn't fit very well for the parallel development scenarios
- **Visibility into Changes :**
 - Limited capabilities on alerting and notifications about the changes which are falling behind
 - Checks that are performed on the transports mostly at release time and continuous alerting is not available
 - Impact of Change on the target system or risk is always a guess work or a manual research
- **Automation**
 - Transport import and feedback to users is several manual steps in CHARM
 - Recreating transport lists and re-importing at the time of refreshes is not available
- **Slower delivery to Production for BAU and Emergency Changes**
 - BAU and Emergencies are often created as same Normal Changes
- **ITSM and Service Desk Eco System Missing**
 - We are missing the ITSM and Service Desk Eco System for support
 - BASIS team is dealing with CRM functional configuration used in customizing the CHARM\ITSM screens



Key Features of Rev-Trac Implementation

- **Moving from Standard model of changes into DevOps and Agile** : With the implementation of rev-trac we are opening the Options to do the Agile development. This opens options of integrations with *Azure Dev Ops* or *Service Now* type of tools to consolidate and manage releases in future.
- **Better Decision Making** :
 - Additional Checks and alerts about the transports that are moving to production (OOPS, PODS, CISS etc.,)
 - Integration with Tricentis Live compared to analyze the detailed production impact and risk of the change
- **Consolidation of Weekly Transports or at Project level**
 - We can run comprehensive analysis at the weekly release to assess risks and identify issues ahead of time
 - Abilities to review the Tuesday release during the integration meeting
 - Ability to approve the full release for Business systems managers instead individual CHARMS
 - For Projects changes, enforcing locks and managing release into QA and Stage instead of managing them at an individual level by the owners.
- **Approvals, QA Enforcement**
 - All Approvals including Business can be digitalized and can be setup in the system
 - Approvals could be based on the business area. We can have different managers, Leads and Business approval persons based on Business area like OTC, WM, TM, FTM etc.



Key Features of Rev-Trac Implementation (Cont'd)

➤ **Mobility :**

- Interface is going to be accessible over mobile for all approvals or in case of pushing changes further in the life cycle
 - Ex : Approvers can respond from phone based on the email notifications.

➤ **Automation :**

- Rev-Trac removes dependency of job scheduled in the SAP for importing the changes into Non-Prod systems. This ensures guarantee of import into each SAP system
- Production deployment are also going to be automated removing dependency on the BASIS team to Import the changes. This helps late night imports and follows up necessary alerts in case of unexpected results
- Rev-Trac can build missing transport after a system refresh and auto sync post refresh with little help from BASIS and functional teams



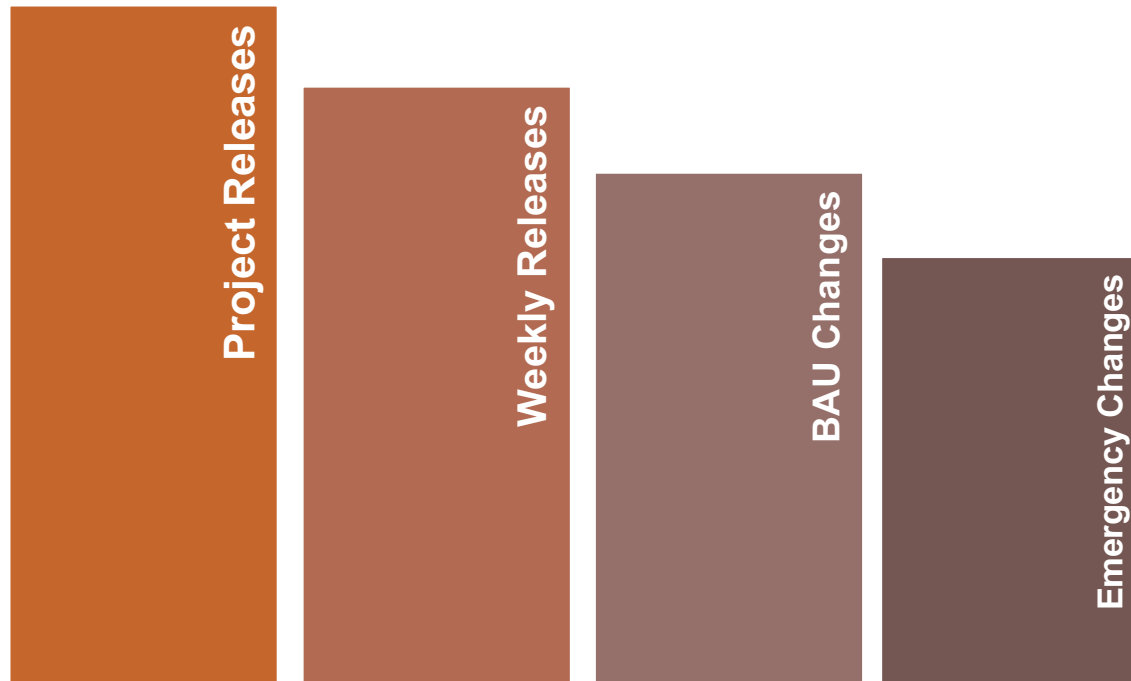
Rev-Trac Safety Checks

Safety Checks Offered by Rev-Trac:

- **Overtake and Overwrite Protection System (OOPS):** This check analyzes the sequence of the transports in the request, avoiding potential deployment of untested changes and more dangerous downgrade situations.
- **Peripheral Object Dependency System (PODS):** Discover other objects that may have a dependency on objects included in the release. As a result, you can avoid potential generation and bad return code situations in the target systems.
- **Code Impact Scoring System (CISS):** Get a score that highlights the relative importance or risk of the code depending on how often the code is called and used in the target production system.
- **Dependency Check:** This check is different to PODS. It manually looks at objects specifically included in the release and if they have any dependencies that were set by a user.
- **In-flight Parallel Check:** Looks for any parallel development of objects included in the release.



SAP Change & Release Categories



Change Types by Volume of Changes



Fast Track Production Changes

BAU Changes

- Exchange Config
- Transportable Config
- Cost Centers
- Tax Config
- Pre-Approved Scenarios

Emergencies

- Code, Config, Customization & Notes
- Significant Revenue Loss
- Risk of Breaching of Customer SLAs
- Impacting users across a department/organization
- Approval from E-CAB

Hyper Care

- Post Go live Fixes
- Code & Config
- Notes
- Project Manager & CAB Approval



Weekly Releases [Tuesday]

Weekly Release

- Minor Enhancement
- Low Risk
- Low\Medium Impact
- Bug Fixes
- Impacting Specific Business Process



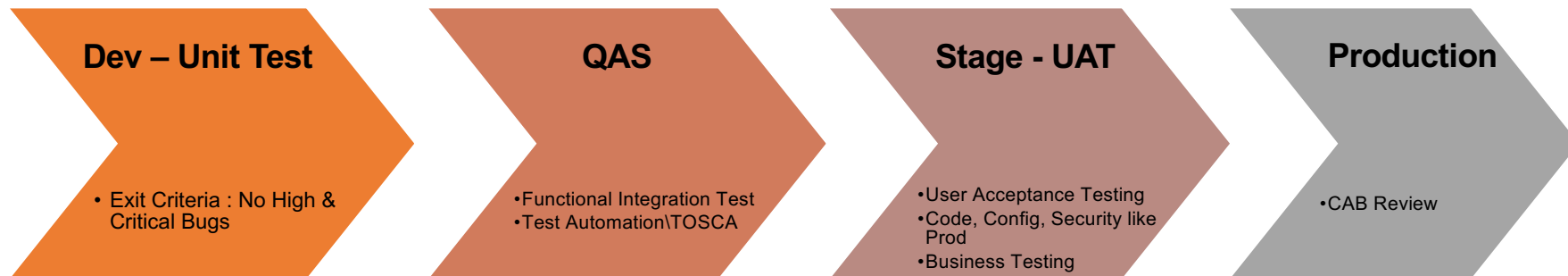
Project Releases

Project Release

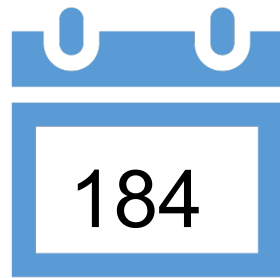
- Major Enhancement
- Longer UAT Cycle
- Custom Develop
- New Business Functions
- System-wide impact



Change Life Cycle



Snapshot of in-progress changes



Changes in Q
not in P



Changes in S
not in P

CHARM enforces waterfall model per change till change leaves QA
This will lead to many inflight changes in different stages of the change life cycle
Becomes difficult track when you have multiple projects and teams
Lot of rigidity in moving a change from one release cycle to Other
All Leading to the difficult times in refreshing systems and improving the Test Quality



Past vs. Current Releases

Past Release Model

Week	1	2	3	4	5	6	7	8	9	10
Change										
A	DEV		QAS		STG					PRD
B		DEV		QAS	STG					PRD
C			DEV	QAS	STG					PRD
D		DEV	QAS			STG				PRD
E								DEV,QAS	STG	PRD
F							DEV,QAS	STG		PRD
G						DEV		QAS	STG	PRD
H				DEV			QAS		STG	PRD
I			DEV,QAS						STG	PRD
J					DEV					PRD
K							QAS	STG		PRD

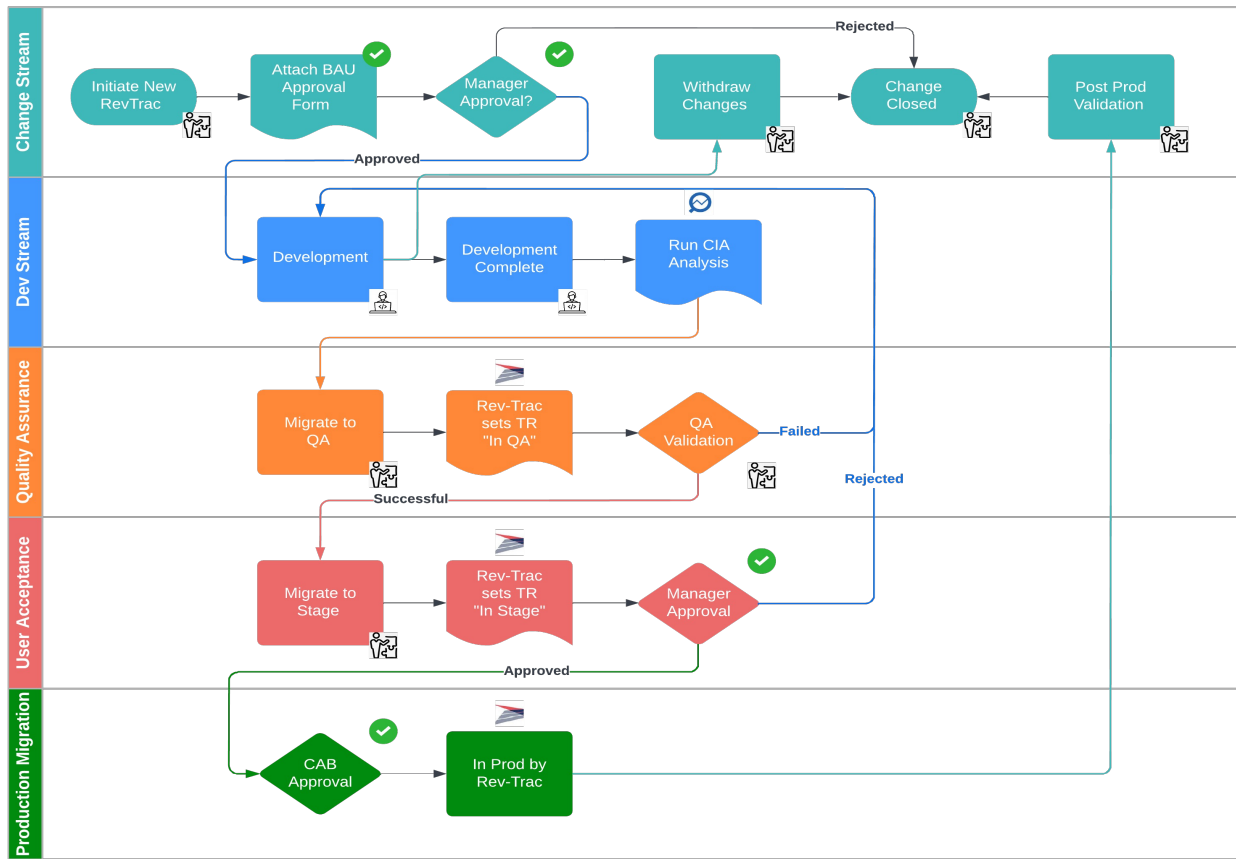
Target Release Model



Week	1	2	3	4
Change				
A	DEV	QAS	STG	PRD
B	DEV	QAS	STG	PRD
C	DEV	QAS	STG	PRD
D	DEV	QAS	STG	PRD
E	DEV	QAS	STG	PRD
F	DEV	QAS	STG	PRD
G	DEV	QAS	STG	PRD

Leveraging Rev-Trac Release Management workbench, helps consolidate regression testing
 Enables us to save time, resources, and cost, and avoid production errors.
 Empowers to provide more accurate new feature go-live dates to the business.



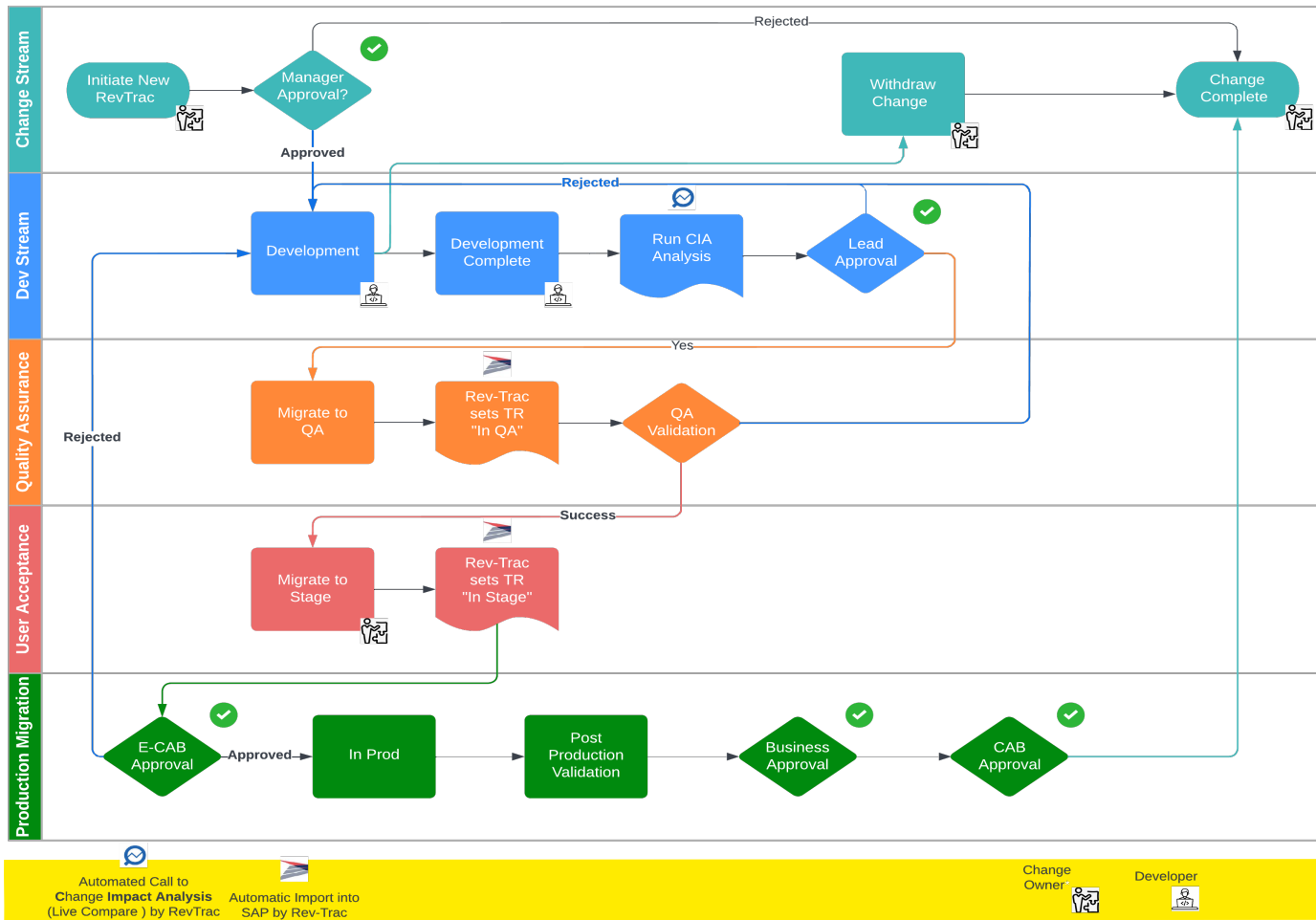
BAU Changes –Rev-Trac Workflow



 Automated Call to Change Impact Analysis (Live Compare) by RevTrac
 Automatic Import into SAP by Rev-Trac

Change Owner  Developer 

Emergency Change – Rev-Trac Workflow

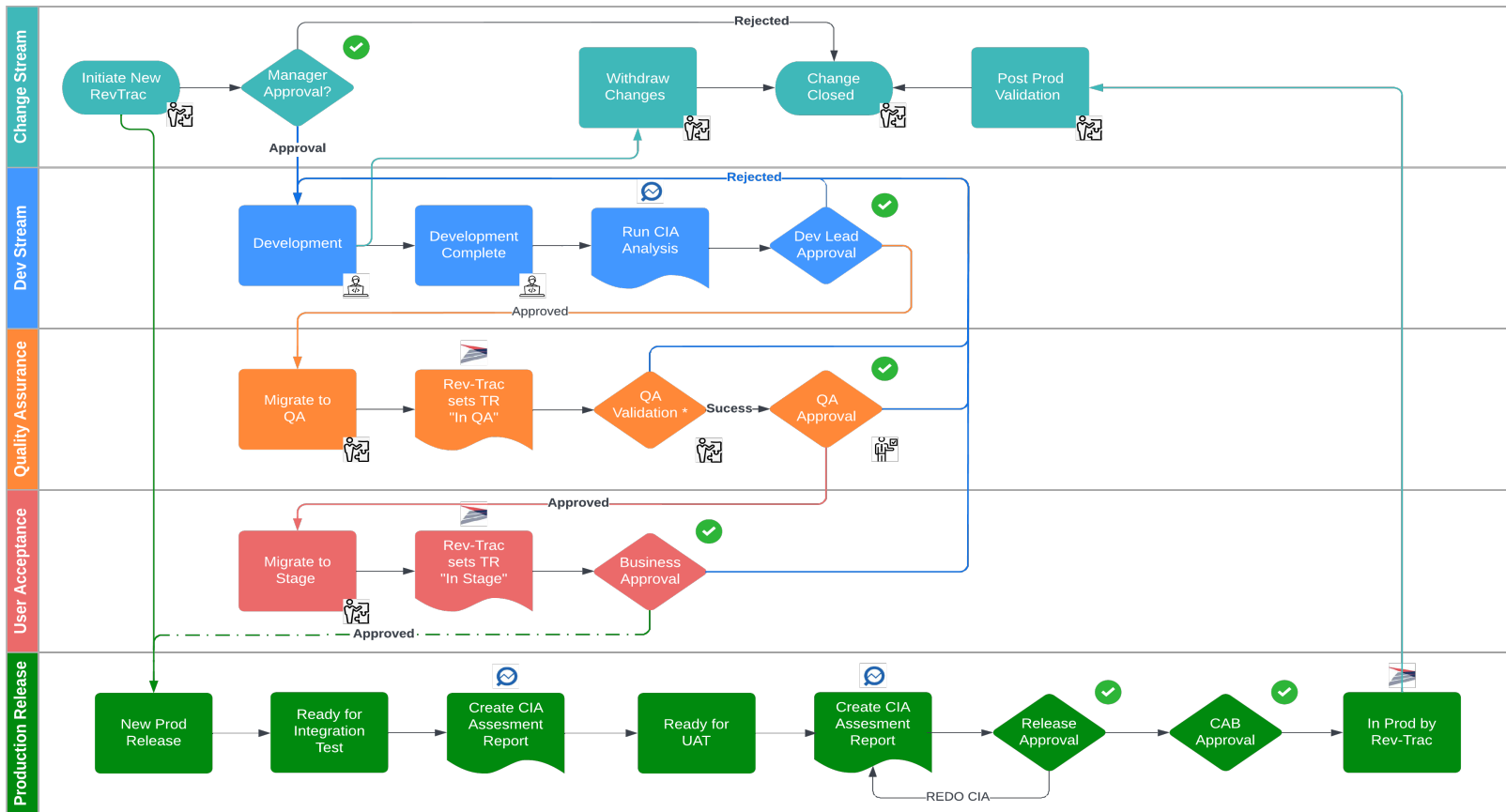


Weekly Release – Rev-Trac Workflow



Automated Call to Change Impact Analysis (Live Compare) by RevTrac
Automatic Import into SAP by Rev-Trac
Change Owner
Developer
QA Lead/Team

Project Release – Rev-Trac Workflow



Automated Call to Change Impact Analysis (Live Compare) by RevTrac Automatic Import into SAP by Rev-Trac

Change Owner Developer QA Lead/Team

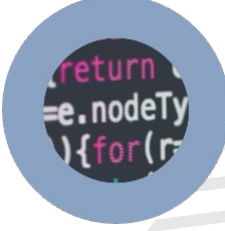
Rev-Trac Agile Change Management



1. Process automation



2. Error Checking



3. Change Deployment



4. Reports & Audit trail

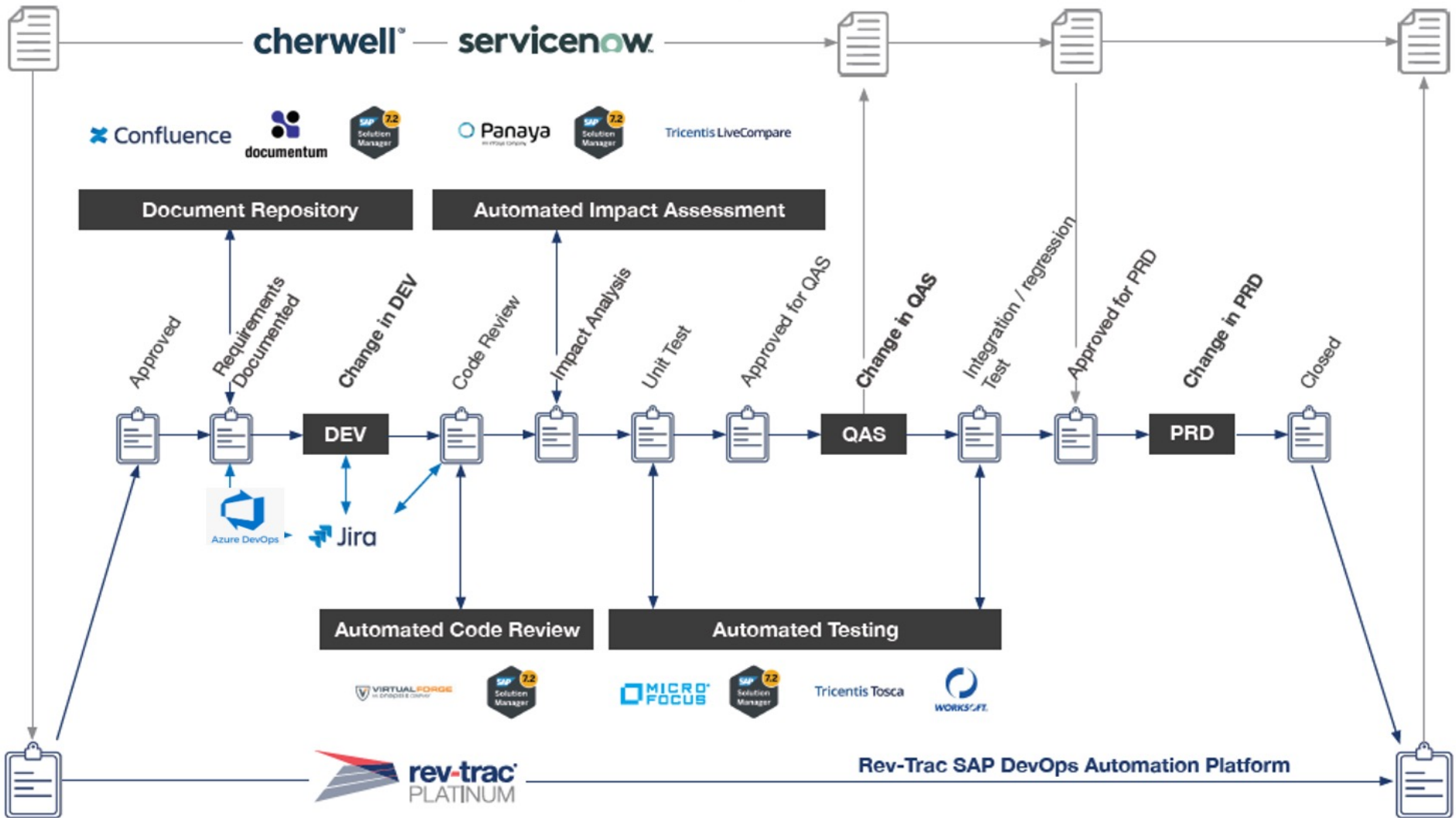


5. DevOps toolchain orchestration



Rev-Trac main functions





Customers' feedback on Rev-Trac outcomes

Internal SAP IT Team Outcomes

- Faster and more frequent SAP releases
- Increased change delivery velocity
- Improved change quality
- Minimal effort to respond to the audit questions
- Lower cost of SAP change management
- Reduced risk of system downtime/malfunction
- On time, on budget project delivery
- Self-service SAP change management



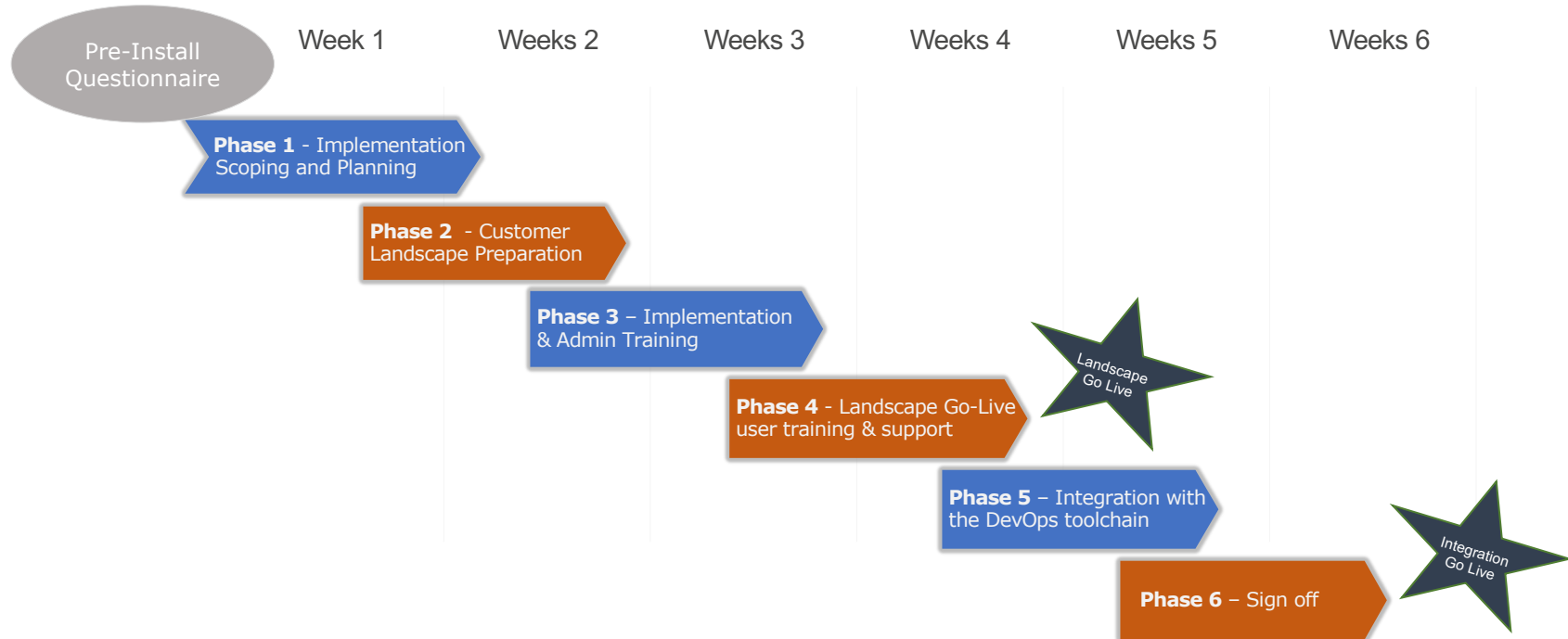
Rev-Trac software provides a powerful SAP change management automation platform that enforces and automates the processes required to manage SAP changes and releases enabling SAP IT teams to meet agility goals, adopt DevOps, increase change volume and velocity, improve system stability and significantly reduce cost.





Rev-Trac Project Lifecycle

Non-disruptive to the existing SAP change management processes



Sample of our customers





Demonstration Scenarios

- Basic Change – Happy Path (with ServiceNow integration)
- Basic Change with Parallel Development
- Basic Change with Dependency Error
- Release Management Changes
- *Change with Cloning/Retrofit- Clean*
- *Change with Cloning/Retrofit – Conflict*
- *ATC and Testing Integrations*
- *Refreshes, Reporting, Insights*
- *Backout*

