

Telelogic CM Synergy 6.3 and ChangeSynergy 4.3

**Capabilities and Benefits Matrix
Version 3.0**

Ease of Deployment and Ease of Use	
Capability	Benefit
Task-based processes allow teams to easily manage and control logical change sets such as features or bug corrections.	<ul style="list-style-type: none"> Higher understanding of configuration and environment contents Intuitive process control.
<i>ActiveCM</i> provides advanced configuration management capabilities without requiring users to change their work habits.	<ul style="list-style-type: none"> Organizations can finally overcome user resistance to CM systems and capitalize on the benefits these systems offer. Lower training costs
Automatic creation of build or test environment snapshots at a specific point in time (e.g. after a successful build or test cycle).	<ul style="list-style-type: none"> Significant reduction in the manual workload of build managers
Routine CM activities – such as changing, renaming, and creating new files – are completely automated and require no manual operations.	<ul style="list-style-type: none"> Software developers are not interrupted or distracted by the CM system and can spend more time on value-added activities.
Synergy can leverage multiple software development processes, including IEEE, SEI CMM, ITIL, and Rational Unified Process (RUP) Processes can evolve dynamically.	<ul style="list-style-type: none"> Avoids having to change process to adapt to the tool Allows choice of adapted processes for each project
Telelogic workflow templates automate any workflow (simple or complex) easily without scripting. This also limits dependency on the author of such scripts.	<ul style="list-style-type: none"> Fast implementation of custom process without hours of design and implementation. Lower cost of administration and re-appropriation.
A release identifier may be composed out of an actual numeric release value and the component (e.g. "CM Synergy – 6.3").	<ul style="list-style-type: none"> Releases can be created, identified and administered according to real life names, not some obscure release tag.
Custom forms and reports can be used based on the user's job function.	<ul style="list-style-type: none"> End users have a role-based interface making day-to-day usage easier Easier learning curve Higher probability of user acceptance
Automatic generation of the online help specific to the lifecycle and attributes produced during customization.	<ul style="list-style-type: none"> Allows faster and higher quality implementation of specific processes (no time spent on producing help files, correct information and no omissions)
Out-of-the-box administration tools.	<ul style="list-style-type: none"> Minimizes administration staff and training. No additional investment in tool licenses or training



User and group access can be restricted per release	<ul style="list-style-type: none"> • Easy to administer security and access control
<p>Versatile release creation (including re-creation of previous versions) from the specific Requirements, Change Requests, Tasks, or files from a specific date.</p> <p>Easy removal of any task, change request, or defect request from a configuration/project.</p>	<ul style="list-style-type: none"> • All assets are stored in a single location and reduce the time wasted on searching for code, documentation, or software CD-ROM images.
All attributes and process models can be modified easily from a web-based interface.	<ul style="list-style-type: none"> • Adaptation and customization process easily mastered • Faster production of appropriate processes and GUI for project teams
Storage of all objects, binaries, and CD images in the repository.	<ul style="list-style-type: none"> • Quick access to archived releases
Automatic generation of dependencies and automatic embedding into the development lifecycle as the baseline for further development	<ul style="list-style-type: none"> • Considerable reduction in the manual workload of build managers
Perl based API support enables unique scripting and automation capabilities.	<ul style="list-style-type: none"> • Implementation of advanced workflows and automation • Integration with other tools (Telelogic tools, hotline, documentation management, production systems...)
Baseline comparing (identify what features have been added between two builds...) and reporting	<ul style="list-style-type: none"> • Simplifies monitoring of the project progress

Offshore development, outsourcing and distributed development support

Capability	Benefit
Distributed CM enables any level of information to be exchanged between sites (file, application, change request, task or entire database). Parallel notification is provided to synchronize global software development organizations.	<ul style="list-style-type: none"> • Increased software quality. • Managed multi-site and off-shore development
Management of distributed change, problem, and defect requests across multiple geographical locations, installations, and processes via Enterprise ChangeSynergy.	<ul style="list-style-type: none"> • Coordination and communication across multiple sites and vendors
Workflow definitions (including release definitions) can be defined in one master database and replicated to other databases where they are enforced and optionally not modifiable.	<ul style="list-style-type: none"> • Provides the ability to control the development process worldwide from one point.
Support of read exclusion across groups.	<ul style="list-style-type: none"> • Prevent different users (projects, subcontractors) having read access to data other than their own.
Firewall and SSL capabilities.	<ul style="list-style-type: none"> • Enables secure access of a ChangeSynergy installation by external subcontractors or suppliers without security concerns.

Scalability to thousands of users	<ul style="list-style-type: none"> Faster deployment and managed total cost of ownership.
ChangeSynergy support of secure HTTPS connections.	<ul style="list-style-type: none"> All information passed within the network or through the Internet is safe and uncompromised Allows distributed organizations to manage confidential change.
Optimized identification and collection of objects to be transferred	<ul style="list-style-type: none"> Halves the amount of objects that need to be transferred daily Less bandwidth needed
ChangeSynergy uniquely indexes all content from change, problem, and defect requests across multiple distributed databases. Users can query for text fields and attributes to retrieve specific content no matter where it is located.	<ul style="list-style-type: none"> Provides unparalleled visibility of the software process.
Creation of parent-child relationships between change requests	<ul style="list-style-type: none"> Allows the breakdown of a request to adapt to globally distributed development teams Allows the breakdown of a request into sub-requests per group or profile (software development, hardware, documentation, production...)
Conflict detection specifically referencing the tasks, change requests, and objects included in a build.	<ul style="list-style-type: none"> Release integrity and higher quality

Multi-product and Team development support

Capability	Benefit
Role-based views indicate all the assigned tasks and associated artifacts.	<ul style="list-style-type: none"> Immediate overview of the development environment and current status of the developer's assignments.
Task-based Configuration Management paradigm (TBCM) automatically associates a user's work to the objects they modify. All objects are automatically checked in when the task is completed.	<ul style="list-style-type: none"> Better accuracy and quality since all software is documented and coordinated.
Synergy can automatically notify multiple team members of certain events and perform hierarchical notification based on changes and state transitions in the lifecycle of changes.	<ul style="list-style-type: none"> Enhanced communication and process speed
Advanced conflict analysis shows conflicts in terms of object and task dependencies.	<ul style="list-style-type: none"> Better control over complex application development.
Existing projects and elements may be reused without having to copy or create new versions of the project or the whole hierarchy	<ul style="list-style-type: none"> Further enhances industry-leading support for Re-use and Component Based Development within CM Synergy Leverage of existing developments

	<ul style="list-style-type: none"> • Usability and performance improvements in large project hierarchies
Concurrent checkout identification automated conflict resolution, and integrity checking.	<ul style="list-style-type: none"> • Developers and build managers are more informed during their development process and can quickly accommodate and integrate changes efficiently. • Build environment accuracy.
CM Synergy and ChangeSynergy are truly integrated and leverage the same repository. All functions and applications are contained within a single package.	<ul style="list-style-type: none"> • Software assets are secure and linked real-time to changes, defect, and problem requests • Avoids change management data and CM system getting out of synch • Makes administration (backups, restores, user access...) easier • Eliminates errors due to improper installation, administration or use of a separate integration / customization package
Change Management functions are directly integrated with ChangeSynergy (leveraging the same repository). Change, defect, and problem requests are automatically associated with development changes.	<ul style="list-style-type: none"> • Easier collaboration • All modifications between code and change requests are available real-time. • Full traceability and reporting
Active and passive merging enables the developers to be notified of parallel development and perform their own merge functions.	<ul style="list-style-type: none"> • Production of more accurate and reliable software.
HTML-based graphical interface for viewing and reporting of changes, problems, development activities or any other action within the systems and software development lifecycle.	<ul style="list-style-type: none"> • Helps everyone within an organization better understand the process and the current status of projects. • By centralizing access to software project activities through an easy to use web portal, the entire organization can have visibility to into all software development initiatives. • Support staff can easily see the status of software patches, product managers can see if a release contents matches the requirements, or a development manager can see if the team is executing their tasks on time.
<p>Different development processes can be defined / authorized for different releases of the same component.</p> <p>Project leader may indicate exactly what process steps must be followed for each release.</p>	<ul style="list-style-type: none"> • Allows implementation and synchronization of multiple processes for the same component or product • Allows parallel development with full tool support. • Central control of process usage
Bill of Materials generation for each build including the specific dependencies, objects, tasks, and change/problem/defect requests included in a release.	<ul style="list-style-type: none"> • Build and QA teams have complete visibility to all changes that occur • Limited regression testing functions that were not changed.

Capability

Benefit

Lower Cost of Ownership	
<i>ActiveCM</i> provides advanced configuration management capabilities without requiring users to change their work habits.	<ul style="list-style-type: none"> • Organizations can finally overcome user resistance to CM systems and capitalize on the benefits these systems offer. • Lower training costs
Minimal system administration support - one person can support over 200 users.	<ul style="list-style-type: none"> • Reduced cost of ownership.
Easy application of attribute changes to versions, target OS, release, etc. should release definitions change Re-use of existing project architecture (developer environments...) for subsequent releases.	<ul style="list-style-type: none"> • Reduces time and number of steps required to get a project back on track or/ set-up a new project.
Synergy can automatically replicate changes so that dual repositories are kept synchronized. Ownership of items is not repository specific and users can be directed to a new server without losing time.	<ul style="list-style-type: none"> • Integrity, accuracy and availability of the software assets.
Routine CM activities – such as changing, renaming, and creating new files – are completely automated and require no manual operations.	<ul style="list-style-type: none"> • Software developers are not interrupted or distracted by the CM system and can spend more time on value-added activities.
Standard Windows file system control automatically implements IDE CM control	<ul style="list-style-type: none"> • Can avoid installing, developing, purchasing or administering IDE integrations
Automatic generation of the online help specific to the lifecycle and attributes produced during customization.	<ul style="list-style-type: none"> • Allows faster and higher quality implementation of specific processes (no time spent on producing help files, correct information and no omissions)
Reliance on proven, commercial databases (IBM, Oracle)	<ul style="list-style-type: none"> • Robustness, scalability and security.
All attributes and process models can be modified easily from a web-based interface.	<ul style="list-style-type: none"> • Adaptation and customization process easily mastered • Faster production of appropriate processes and GUI for project teams
All attributes and processes can be modified dynamically	<ul style="list-style-type: none"> • No down-time for users dues to administrative procedures • Allows 24/7 user access
Run multiple build steps concurrently by building only those components that have changes and targeted specific modules be built on certain machines.	<ul style="list-style-type: none"> • Decreases the time it takes to build software. • Teams can begin testing immediately.

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