

PureCM 2010-1

PureCM Professional 2010-1d (SQL Server) Data Sheet
Software Change and Configuration Management

PureCM
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PureCM Professional: Agile Application Lifecycle Management

Becoming more agile and productive is a challenge for any development team. Delivering software more frequently and in smaller bits is what gets you there, and PureCM Professional is your solution to make this happen.

With PureCM Professional 2010-1 you can plan your releases, schedule tasks and track progress throughout your development lifecycle – while staying lean and agile.

Let your teams collaborate on a shared project repository to facilitate communication and provide unmatched transparency even when working with distributed development.

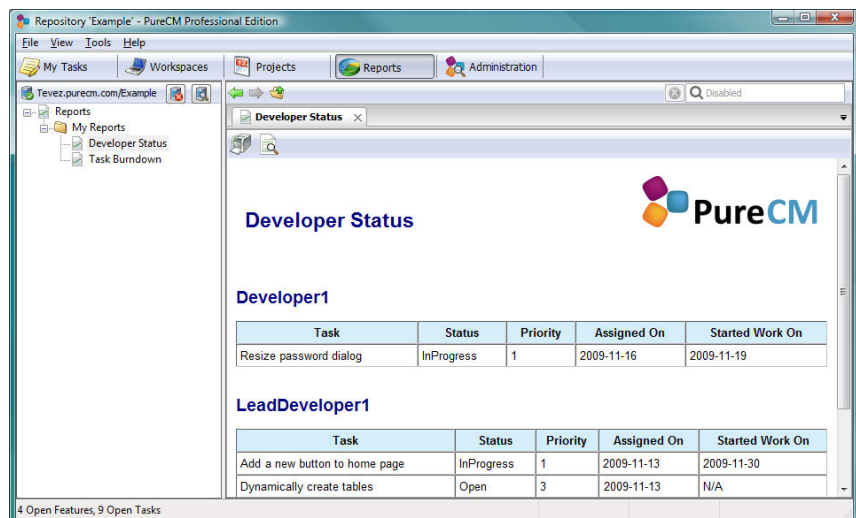
PureCM Professional. Take your development to the next level.

What's new in PureCM Professional 2010-1 SQL Server?

PureCM Professional 2010-1 SQL Server builds on the 2010-1 release and comes with **extended support for leading database backends**. Users can now choose between an embedded SQLite or SQL Server repository database.

Both database systems are highly proven in the market and assure your data is safe. SQLite offers optimised performance for smaller teams, while SQL Server offers unmatched scalability and access to its management and reporting capabilities.

Further enhancements include **additional reporting capabilities**, e.g. fully customisable project burndowns and per developer task overviews.



The screenshot shows the PureCM Professional Edition interface. The main window displays a 'Developer Status' report for 'Developer1'. The report includes a table with columns for Task, Status, Priority, Assigned On, and Started Work On. Below this, there is a section for 'LeadDeveloper1' with another table showing tasks assigned to them.

Task	Status	Priority	Assigned On	Started Work On
Resize password dialog	InProgress	1	2009-11-16	2009-11-19

Task	Status	Priority	Assigned On	Started Work On
Add a new button to home page	InProgress	1	2009-11-13	2009-11-30
Dynamically create tables	Open	3	2009-11-13	N/A

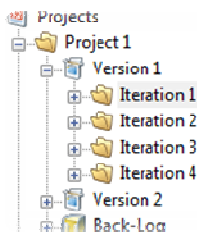
Together with PureCM's real-time status tracking, development managers can now be sure to stay on top of their projects, even when working with distributed teams.

Project Planning

Does it make sense to introduce agile planning just to realise it's not applicable with your current software development infrastructure?

Probably not. This is why PureCM Professional challenges the traditional separation of project and configuration management to propose a fully integrated solution combining flexibility and automation capabilities.

Release planning features



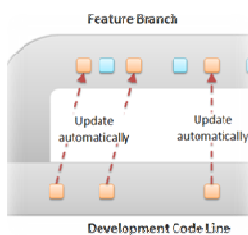
Implement the planning structure that suits you best, working with intuitive drag & drop scheduling.

- **Customisable planning objects.** Support agile planning using iterations and backlogs, or work with releases and milestones.
- **Planning and SCM integration.** Define new versions for your release planning, and their code lines will be automatically branched behind the scenes to facilitate parallel development.
- **Features and tasks to reflect work items.** Implement a work item hierarchy using high-level features and smaller tasks.
- **Drag & drop scheduling.** Make life easy by dragging tasks or features from the backlog to the release you want to schedule them against.
- **Role-based notifications.** Using the new task dashboard, every user can check his personal tasks in one place.
- **Real-time progress reporting.** As planning and configuration management use the same repository, any task and thus project updates can be reflected automatically and in real-time.
- **NEW Powerful reporting.** Customisable Burndown and Developer reports allow you to check whether you're on track and who's doing what. Easily export report data for further analysis in 3rd party tools.

Software Configuration Management

The core software configuration management module is identical for PureCM Standard and Professional. On top of that, the Professional edition adds full integration with Project Planning and Task Tracking, combined with automated support for parallel development.

Facilitated parallel development



Automate work with feature branches to keep your code line release-ready without additional overhead.

PureCM uses ‘streams’ to represent branches and labels, which allows each Version and Feature to use its own branch. This is possible because streams provide two main advantages when compared to traditional tools:

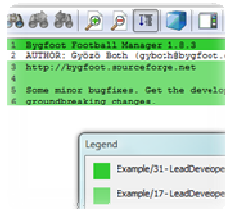
1. PureCM streams form a hierarchy and inherit their content from their parent when created. This allows for instant and lightweight branching, even with thousands of streams.
2. The stream hierarchy allows changes to ‘flow’ automatically between streams (automated merging). This avoids overhead, as changes can be applied to multiple streams with ease.

The automated change flow between versions and features can be fully customised with merge rules, dramatically reducing overhead for **parallel development** or the use of **feature branching**.

Once a developer starts work on an assigned feature, it gets branched and starts receiving updates automatically as a part of the hierarchy. This minimises overhead while work is in progress and avoids a ‘big bang’ integration at the end.

At the same time, the project history is fully preserved both on the feature and its parent version.

Configuration management features



Get an annotated line-by-line history with one of PureCM's many visualisation tools.

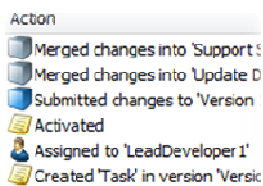
- **Private workspaces.** Private workspaces are a local copy of the feature or version a developer is working on. This allows creating revisions even when working disconnected.
- **Eclipse and Visual Studio integration.** Use the functionality of PureCM within your favourite IDE.
- **Full refactoring support.** Even with parallel development, PureCM can safely manage code refactoring, e.g. when name space and content changes are submitted in parallel.
- **End-to-end audit trails.** Track every change from task creation to linked file changes and performed merges thanks to the full integration with project planning and task tracking.
- **Shelving.** Use shelving to checkpoint your ongoing work or pass it to your colleague without integrating into the code line.
- **Shared components.** Define folders that are shared among different PureCM projects to keep them automatically in sync.
- **File history.** The PureCM file history shows a summary of each file revision. From there, you can dynamically access the tasks the revision was submitted against to get the full context.
- **Annotated file history.** Visualises a file's revisions by using colour codes. See when and by whom a change was made for each line of code – especially useful when fixing bugs.
- **Visual folder compare.** Visualise file and folder differences between any two configurations: two releases, two branches or even your local workspace vs. the server version.
- **Live checkout tracking.** Indicates for each file by whom it is currently checked out or locked to facilitate collaboration.
- **Cross-platform server and GUI.** PureCM comes with a Windows, Linux, Mac and Solaris GUI. Mix and match any client-server combination according to your needs.
- **Command line client and open .NET/Java APIs.** Automate your SCM using its open interfaces and powerful triggers.

Task tracking and change management

PureCM Professional comes with fully integrated tracking, helping to facilitate collaboration and saving time for release management.

As PureCM Professional is an integrated solution, all actions can be based on tasks throughout the development lifecycle. Any information about scheduling, requirements or file revisions made are accessible in one place, saving you valuable time.

Task tracking features



Use PureCM Professional's task tracking to implement true task-based development.

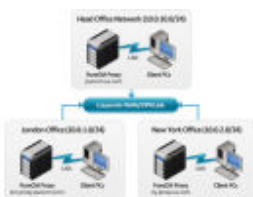
- **Real-time project updates.** Get an immediate overview of all task statuses, drilling down from program and project to iteration level.
- **End-to-end tracking.** See any action made against a project from a task-based perspective. This includes creating, assigning or changing tasks, as well as any related code changes.
- **Powerful workflow management.** Use tasks to manage your development workflow. Use policies to enforce rules, e.g. to require code changes to be made against tasks.
- **Project history across releases.** See which features and tasks are completed in a specific release, or check in which release(s) a specific task or feature (e.g. a bug fix) is present.
- **Automated workspace mapping.** Thanks to its SCM integration, developers get their workspace automatically populated with the correct project version when starting work on a task.
- **IDE integration.** Developers can start work on tasks directly within Visual Studio, saving time with automated task status updates and full access to the task history.

Build automation and deployment

Use PureCM Professional to improve the productivity of your development team. Automation allows you to speed up repetitive tasks, to avoid human errors, and to provide instant feedback to developers.

- **FinalBuilder and CruiseControl.NET integration.** Use the out-of-the-box integration with these favourite build tools to quickly set up an automated build solution.
- **APIs, triggers and command line client.** Define custom actions based on triggers in PureCM. The existing .NET and Java SDKs greatly simplify the development of custom scripts or allow for custom integration with 3rd party tools.

Distributed development



PureCM Professional helps you to accelerate distributed teams using PureCM's proxy server. They **cache server data in remote locations** to provide local data access performance.

Once installed, there's no additional administration needed. Client access to Proxy Servers is **managed centrally on the PureCM server** without requiring any client side setup. For developers, nothing will change – except for a dramatic increase in data transfer performance.

Administration and security



Use PureCM's simple but powerful security policies to manage access to your configuration items.

PureCM is designed to minimise administrative overhead, offering centralised administration even when deploying proxy servers.

- **NEW Customisable database backend.** PureCM 2010-1d supports the proprietary legacy database, SQLite and SQL Server. Additional support for and MySQL will be available soon.
- **Atomic commits.** All PureCM transactions are applied atomically to protect database integrity, i.e. completely or not at all.
- **ACLs and user groups.** Permissions are policy-based to control access to all configuration items. Policies can be set against individual users and/or user groups.
- **Windows domain authentication** and automatic user creation. Alternatively, use password authentication or security certificates to control database access.
- **SSL/TLS support.** Ensure secure remote access by optionally enforcing SSL encryption or VPN use.
- **Backups and database integrity checks.** PureCM allows for full automation of backup creation and database integrity testing using its command line client and administrative tool “tdbutil”.

OS Platform Support	System Requirements for PureCM Server
<ul style="list-style-type: none"> ▪ Windows client: XP, Vista, 7 ▪ Windows server: 2003, 2008 (R2) ▪ Linux client & server: Fedora 5+, Red Hat Enterprise 5+, SuSE SLES 10 SP1, Ubuntu 8.04+ ▪ Mac client: OS X 10.4+ (Tiger) ▪ Mac server: OS X 10.6+ (Snow Leopard) ▪ Sun Solaris client & server: 8+ 	<ul style="list-style-type: none"> ▪ 133 MHz or higher Pentium compatible CPU ▪ Recommended RAM of your operating system plus 10 MB per user ▪ Free disk space for double the size of the source code