PureCM 2010-2

PureCM Standard 2010-2 Data Sheet
Software Configuration Management

PureCM
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Contents

PureCM Standard
Software Configuration Management

Improving your development lifecycle requires the capability to define, manage and retrieve any software configuration at any time with an absolute minimum of overhead.

PureCM Standard is the reliable and easy to use software configuration management solution you always wanted. Designed to provide fast, safe and intuitive source control and configuration management, development managers get a tool that helps them to boost quality and productivity.

Task-based development, lightweight and transparent branching and merging, as well as full support for build automation make sure there's plenty of room for improvement. PureCM will help you to stay in control, even when working with distributed development.

PureCM Standard is flexible enough to support any development type whether it's agile or waterfall, desktop applications or web. And thanks to its cross-platform GUI and IDE integrations, developers can work where they want to, with minimal training requirements.

What's new in PureCM Standard 2010-2?

PureCM Standard 2010-2 extends the **Visual Studio integration** and provides users with fully-featured access to PureCM. Stop being limited to checkout and checkin and get access to repository browsing and visual file and folder diffs.
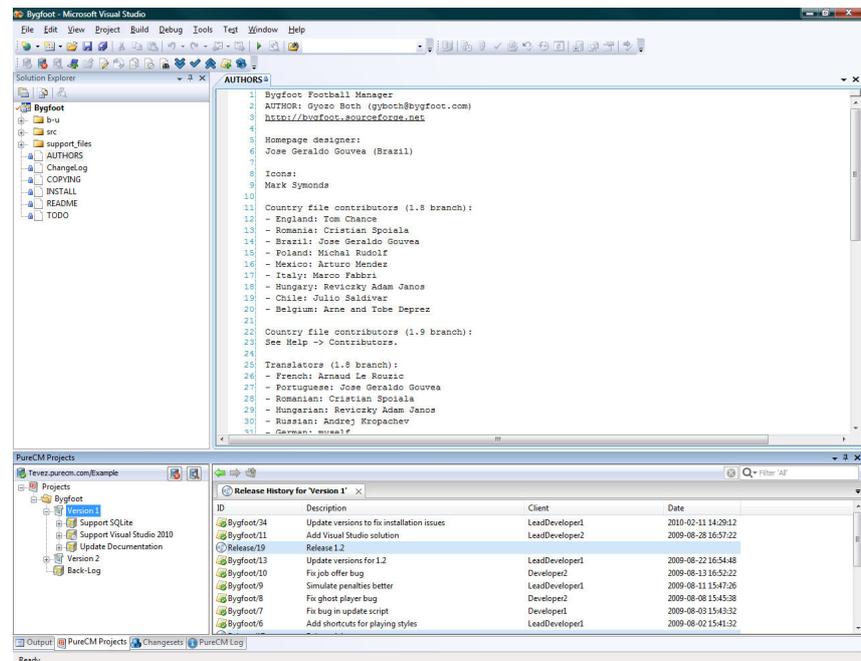

Based on market leading database systems such as SQL Server or SQLite, PureCM Standard 2010-2 has also seen **performance improvements** making it one of the fastest change and configuration management tools on the market.

PureCM 2010-2 now also comes with native **support for 64 bit** Windows installations to complement the 64 bit support for Linux.

Managing parallel development

PureCM uses two core concepts to make parallel development safer, quicker and easier to understand: **task-based development and stream-based branching and merging**.

Task-based development
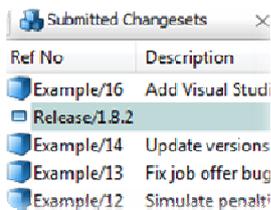
*PureCM **changesets** are fully dynamic, so a double click allows you to browse through the changes or its merge history.*

Traditional version control tools treat each file change as a separate transaction. Not PureCM. Using PureCM, you can change, add, or delete as many files as you want to resolve a task. All these changes are grouped into a '**changeset**' that can be tracked throughout PureCM.

This makes it easy to add a meaningful comment or to associate the changeset with an issue in your issue tracking tool. Even months or years after changing a file, you will **understand why a change was made** and which files where affected.
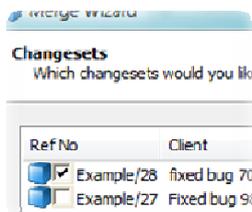
To maximise database stability, all **changesets are applied atomically**, thus completely or not at all. This protects your database integrity should the transmission fail in the middle of the transaction, e.g. because the connection was cut.

PureCM's feature rich **Eclipse and Visual Studio integrations** reduce training needs when migrating to PureCM. The IDE plugins enable task-based development without forcing developers to quit their favourite environment.

Stream-based branching and merging

Streams in PureCM represent both branches and labels. With the new project view, development managers can now automatically apply the stream type they need: a dynamic stream (i.e. branch) when defining a new 'version', or a static stream (i.e. label) when creating a 'release'.

PureCM streams form a hierarchy and simply reference a specific changeset of their parent stream when they are created. This allows for **instant branching**, even with large projects and thousands of streams within the same repository.
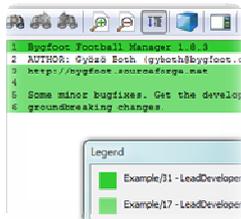
To **merge changes between streams** or to integrate a branch, you can merge directly on the server with an intuitive preview tool. PureCM Standard launches an easy to use visual dialogue that allows you to cherry pick, preview and confirm the changes you want to merge individually or as one.

Merge tracking is fully automated with PureCM Standard. Each changeset remembers where it was merged to or from to give development managers full transparency of their development and to avoid remerging.

Developers simply create a **private workspace** from the version they want to work on to get a local project copy. This gives them full control about when to get their colleagues' changes, minimising disruption and enhancing productivity for both on and offline development.

Read/write permissions to all objects in PureCM can be easily defined setting policies against users or user groups, providing a powerful yet simple way to protect your key assets. Whether you want to protect a whole release or just a single file, PureCM Standard puts you in control.

*PureCM automatically detects changesets that that aren't present in the destination stream. Simply **cherry pick the changes** you want to merge.*

Additional source control features

- **Atomic commits**. All PureCM transactions are applied atomically to protect database integrity, i.e. completely or not at all.

- **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 to avoid conflicts, e.g. due to parallel name space and content changes.

- **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 changeset the revision was included to get a complete picture.

- **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 for distributed development.

- **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.

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

Build automation and deployment

Use PureCM Standard 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.
- **UPDATED – 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.

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 based on policy-based administration.

- **NEW – Native 64 bit support**. PureCM now comes with 64 bit versions for all supported Windows and Linux operating systems.
- **Customisable database backend**. PureCM 2010-2 supports the proprietary legacy database, SQLite and SQL Server. Additional support for and MySQL will be available soon.
- **ACLs and user groups.** Permissions are policy-based to control access to all configuration items. Policies can be set against individual users and 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.

Platform Support	System Requirements for PureCM Server
- **Windows client**: XP, Vista, 7 - **Windows server**: 2003, 2008, 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+	- 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