PureCM Data Sheet

PureCM 2009-2 Professional
Software Configuration Management

PureCM
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PureCM Professional
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. This is the essence of what you get with PureCM.

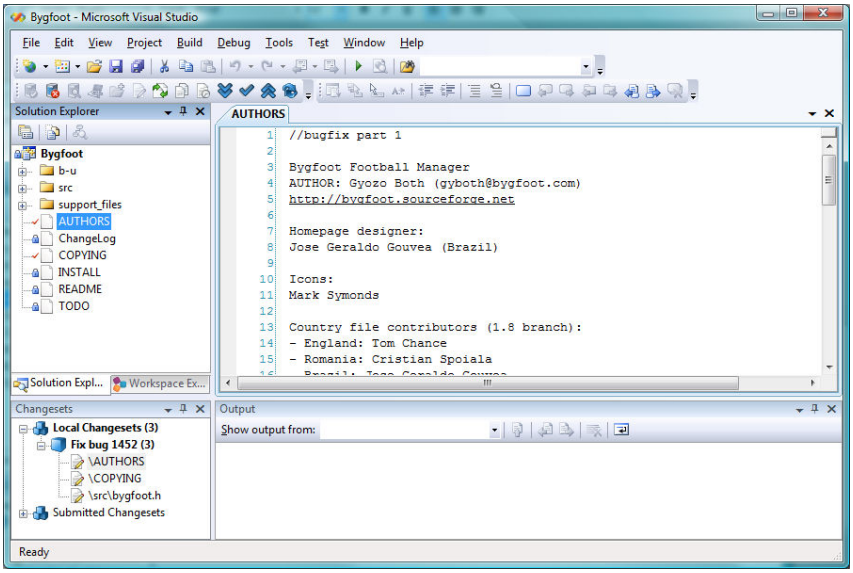
But PureCM Professional is more. Designed to grow with your demands, you can leverage parallel and distributed development, task-based development with full issue tracking integration and build automation to improve your processes throughout the application lifecycle.

With PureCM Professional taking care of the background tasks, you can focus on improving the quality and productivity of your software development. Foster team collaboration and get an environment with unmatched visibility into the development process.

What's new in PureCM 2009-2?

PureCM 2009-2 brings more features than ever to the developers' environment, their IDEs. PureCM now includes a **custom plugin for both Visual Studio and Eclipse**. This means more features and better information without leaving your environment.

Custom panes give full insight into changesets submitted against a project, proving team members with full project visibility. Visual Studio users can even **organise checkouts in multiple changesets, use shelving or integrate branches**.

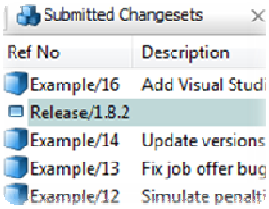


Besides IDE integration, PureCM Professional now supports **bi-directional integration** with 3rd party issue tracking tool Axosoft OnTime, adding helpdesk functionality to PureCM.

Performance has also improved dramatically, achieving up to **400% faster data transfers** when submitting data to the server.

Managing parallel development

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



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

PureCM changesets

Traditional version control tools regarded each file change as separate. Not PureCM. Using PureCM, you can change, add, or delete as many files as you want to fulfil a task. All these changes are grouped into a so called **"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.

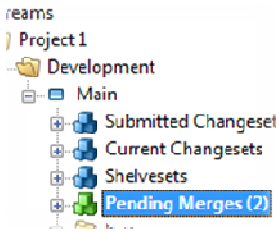
To maximise database stability, all **changesets are applied atomically**, thus all or none. This makes sure that your database is not left in a corrupted state should the transmission fail in the middle of the transaction.

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

Streams

Streams in PureCM represent both branches and labels. They can be seen as a fully dynamic snapshot of the code line at the time they are created.

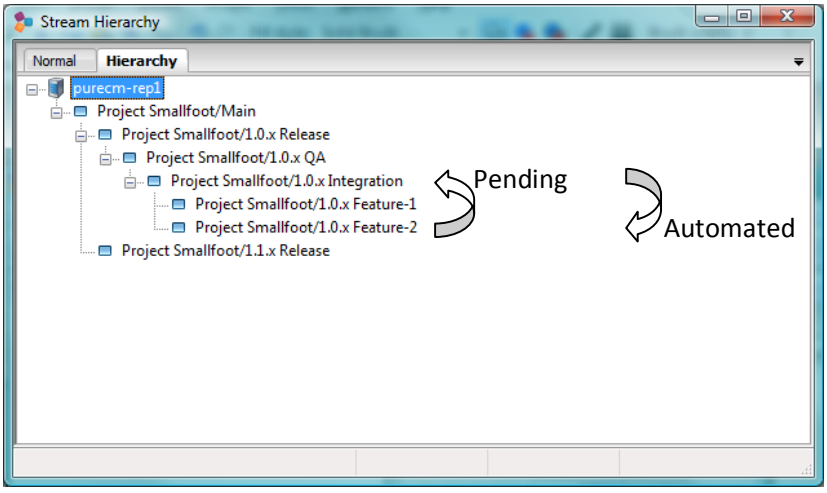
PureCM streams **inherit code** from their parents and form a hierarchy. This design allows for instant and lightweight branching, even with hundreds of parallel streams. This simply means that you can apply any branching pattern you want when working with PureCM.



PureCM's streams let you define relationships. Thanks to this feature, PureCM can tell you at any time which changes need merging.

Gone are the days where bug fixes were not applied to a branch!

This hierarchy also allows you to setup automatic '**Merge Paths**' that **track differences between streams in real time**. Depending on your setup, PureCM Professional can either highlights pending merges for integration or automatically integrate them to the target stream, e.g. from the integration to the feature streams as shown below. This makes parallel development much safer and efficient.



As streams remember their hierarchy, **merge tracking** becomes very easy. Each changeset remembers where it was merged to or from to give you full transparency of your development.

Additional configuration management features

- **Private workspace**. Each developer works in their private workspace, which is a local copy of the code. This allows you to make changes in isolation from your colleagues, create revisions, test them and integrate your colleagues' changes in a controlled manner.
- **Shelving and local revisions**. Want to checkpoint your ongoing work or pass it to your colleague? Simply shelve your change on the server. PureCM even supports creating local revisions in your workspace, e.g. when working without server connection.
- **File history**. The PureCM file history shows a summary of each file revision. From there, you can dynamically access every changeset to see what happened in any revision.
- **Annotated file history**. Visualises a file's revisions by using colour codes. Highlights when and by whom a change was made for each line of code – especially useful for bug fixing.
- **Stream comparer**. Visual tool to highlight file and folder differences between any two configurations: two releases, two branches or even your local workspace vs. the server version.
- **Multiple checkout and file lock**. PureCM allows you to define multiple checkout or file locking for each file type, stream or user.
- **Live checkout tracking**. Indicates for each file by whom it is currently checked out. Very useful to know who to contact when using file locks.
- **Shared components**. Define component folders that are shared among different PureCM streams to keep them automatically in sync. Manage component updates centrally in the PureCM Component Manager.
- **Cross-platform server and GUI**. PureCM comes with a Windows, Linux, Mac and Solaris GUI. Mix and match any client server setup according to your needs.
- **Eclipse and Visual Studio integration**. Use the functionality of PureCM within your favourite IDE.

Issue tracking and change management

Integrate PureCM with your issue tracking tool to achieve change management visibility throughout the development lifecycle.

PureCM Professional comes with fully **integrated issue management** module, including multiple out-of-the-box workflows. Linking change request to code changes provides better visibility and assures compliance with audit requirements, especially in distributed environments.

Workflows and issue fields are fully customisable and support multiple issue types, e.g. defects, enhancements and tasks.

Predefined reports help you to keep track of your development status and to automate release note creation. Reports can be based on changesets or issues, again being fully customisable.

If you want **to integrate your existing issue tracking tool** with PureCM issues**,** you can easily do so via PureCM's .NET or Java API. Bi-directional integration makes sure you can create and update issues on both sides while assuring automatic synchronisation.

PureCM Professional already supports an out-of-the-box integration with Axosoft's OnTime to allow for collaboration across functional teams. Whether it's your support helpdesk, development or QA teams: everybody gets the same information in their favourite tool.

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.
- **Triggers and command line interface.** Define custom actions based on triggers in PureCM. The existing .NET and Java SDK greatly simplify the development of custom scripts.

Proxy server for distributed development

PureCM Professional helps you to accelerate distributed teams using PureCM's proxy server. They **cache server data in remote networks** 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 the 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.

- **Windows domain authentication** and automatic user creation. Alternatively, use password authentication or security certificates to control database access.
- **ACLs and user groups.** Permissions are policy-based for both configuration management and issue tracking to control access to all configuration items. Policies can be set against individual users and user groups.
- **SSL transmission**. 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".

Platform Support	System Requirements for Server
▪ Windows client: 2000/XP/Vista/Windows 7 ▪ Windows server: NT, 2003, 2008 ▪ Linux Fedora 5+, Red Hat Enterprise 5+, SuSE SLES 10 SP1, Ubuntu 8.04+ ▪ Mac OS X+ ▪ Sun Solaris 8+	▪ 133 MHz or higher Pentium compatible CPU ▪ Recommended RAM of your OS plus 10 MB per user ▪ Free disk space for double the size of the source code