Dimensions CM

An efficient, collaborative DevSecOps platform, including code management, continuous integration, artifact management, peer review, vulnerability management and life-cycle control to help speed delivery by local and remote development teams.

**Product Highlights**
Scalable, secure, and optimized for distributed development, Dimensions® CM is an end-to-end DevOps solution that provides Git-based version management, continuous integration support, secure artifact storage, code vulnerability scanning, and extensive plugin-based integrations, utilizing native ticketing (requests) or seamless integrations to common Agile tools like Atlassian Jira or ALM Octane.

**Features and Benefits**

**Change and Branch Visualization**
Visualize development streams in a graphical timeline view. Monitor the status of deliveries and any associated CI builds and peer reviews. Minimize rework, reduce conflicts, and improve team velocity and collaboration.

**Internal or External Work Items**
Dimensions CM provides a powerful, secure and configurable internal request (work item) system, allowing teams to create and track development iterations and to visualize and manage the status of development requests. With a powerful component supporting permissions model and code-to-release tracking built in, requests can track all aspects of development activity and enable drag and drop support via configurable card walls. Dimensions CM seamlessly integrates with Agile tools such as Atlassian Jira or ALM Octane through pre-packaged "request providers." Simply enter connection details and start working on external tickets. For optimal flexibility, mix requests from multiple providers and work from a single, consolidated inbox.

**Key Benefits**
- Modern developer experience and integrations
- Increase development speed-to-value
- Higher quality, lower risk application delivery
- Out-of-the-box DevSecOps support
- Built-in audit compliance and traceability

**Key Features**
- Traditional and Agile Request Management
- Immutable Baselines
- Component Level Security with product variant support
- Git and proprietary Version Management
- Continuous Integration Server
- Process-centric Artifact Vault
- Collaborative Peer Review
- Graphical “Build” Tool Chains
- Code Vulnerability Scanning and remediation
- Visual Change Graphs
- Built-in audit compliance and traceability

**Improve Process Efficiency**
Enterprises are unique, from both an application development and SDLC process perspective. Dimensions CM includes powerful out-of-the-box processes to help reduce software development complexity and improve team performance. Processes can be quickly and easily tailored to...
perfectly fit your organizational needs, be those fully automated DevOps, Agile, Traditional or a blend of the three. Dimensions CM provides fully customizable support for privileges, users, and roles, product definitions, design part structures, valid sets and object type definitions, lifecycles, baselines, releases, items, request templates, upload rules, preservation policies, data formats and MIME types and area definitions. If your organization needs a configurable DevSecOps solution, Dimensions CM supports you.

**Continuous Integration and Build Servers**
Provide rapid feedback to developers by configuring in-built CI Server toolchains, or integrate your preferred build, code style check, code analysis, and security or vulnerability tools. Run on commit, or at scheduled times, to execute a complete CI chain. Build results are aggregated in dashboards, exposing key development metrics, with real-time review comments, all from a single user-friendly interface.

**Product and Git Repository Support**
With support for product-line delivery—major units of software development, containing a collection of streams—or controlled Git repositories managed on a secured server, Dimensions CM supports modern development practices and tool integrations. Out-of-the-box stream-based delivery and deployment is standard, with support for complex branch and version naming also available.

**Secure Component-based Development**
Enterprise applications comprise of multiple components, with unique security constraints and access requirements. Complex, high-value products often deliver multiple variants, adding a level of development and support complexity. Dimensions CM provides a powerful, fully configurable variant management and governance system to support the most complex and demanding product line development.

**Immutable Baselines**
Change and version management code is just the beginning of the DevOps delivery process. In Dimensions CM, a baseline is a snapshot of a design part or a project/stream at a particular time. Baselines ensure that the design parts and items included in the baseline can be reliably recreated in the future, when system or code refactoring has occurred. For example, organizations create baselines before starting a maintenance cycle or assigning further development activities to ensure that the current state can be recreated at any point. Baselines can also form the basis of deployment activities—for example when a specific configuration needs to be moved between different environments such as user acceptance testing, pro-production staging or production.

**Hardened Enterprise Repository**
Security breaches are costly to brand, reputation, and customer confidence. Dimensions CM has led the market in secure software configuration management for over 20 years. Featuring integration with developer friendly repositories and IDEs (such as Git, IntelliJ, Eclipse, and Microsoft .net), detailed auditing and logging, and immutable versioning and history, Dimensions CM provides a fully secure, hardened, enterprise-grade repository with support for next generation working practices. A complete DevSecOps solution from a single platform.

**Collaborative Peer Review**
Agile or not, Peer Reviews enable team collaboration and provide insight into the health of changesets, streams, builds, and branches. As role specific actions that support both rules and rule scripts, peer reviews allow associated changes to be automatically transitioned—for example to approve or reject changes. Reviews support auditable multi-user voting and collaborative chat to help simplify and streamline developer interaction.

**Artifact Vaults**
Keeping track of self-generated or third-party artifacts can be a complex and time-consuming process. Dimensions CM Artifact Vaults are used by package managers, such as Maven, npm, or NuGet, to restore and retrieve components during build and deployment processes. Vaults have audit trails, reviews, and approvals enabling the management of your own and third-party packages, simplifying complex integrations with build systems, and providing...
“Managing development in Dimensions CM not only allows our teams to develop at speed, but never lose our focus on quality, while maintaining a comprehensive change and audit history, and lowering the risks and costs of audit and compliance.”

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Navy Federal Credit Union

a system of record for approved and secure artifacts. With rules-based retention policies to optimize storage, and notifications about artifacts containing vulnerabilities, never worry about reproducing critical software builds and configurations.

Graphical Deployment Automation
Continuous Integration pipelines and tool-chains are easily extended to include full Continuous Delivery support using in-built Deployment Automation. Automated deployments map products to target environments using graphical, integration driven component and application processes.

Mainframe Ready
Many progressive enterprises still contain the “M” word, with mainframe systems continuing to power systems of record for a huge number of enterprises. Rather than leave mainframe teams to deal with confusing and complex DevSecOps transformations, Dimensions for z/OS enables mainframe hardware to participate fully in a Dimensions CM network, without the need to leave the mainframe. With a fully featured ISPF client, batch interface support, command line client interaction and mainframe specific deployment support, Dimensions CM is ready to bring DevSecOps processes and support to z/OS.

Integrated, Integrable
The complexities of modern software development environments are many. From stand-alone tools to market leading point specific products, the rich and varied nature of tools used by a successful enterprise has never been greater. With out-of-the-box integrations to a huge list of tools, and numerous interaction mechanisms where pre-configured integrations don’t currently exist, Dimensions CM is ready to interact with every tool we can think of—and some we haven’t. Featuring C and C++ APIs, an event callout interface, a Java API, Dimensions CM Templating language, Web services APIs, support for ALF events (Application Lifecycle Framework) and a Bill of materials API (to generate SBOMs as needed), Dimensions CM has the power to extend to meet your SDLC and DevSecOps needs.

Figure 6. Code Review & Commit within IntelliJ IDEA

Seamless Requirements Management
In organizations where formal requirements management processes are followed—for example the Automotive, Aerospace or Manufacturing sectors—the association between requirement and deliverable, in this case the software product deliverable, is key. Successful delivery against ever changing requirements requires a level of co-ordination and governance infrequently found in open-source software projects. Dimensions CM natively integrates with Dimensions RM, to provide complete, auditable and transparent requirements to delivery insight. For example, when adding a requirement to, or removing a requirement from, a Dimensions RM container of type baseline or collection, Dimensions CM is notified with the relevant information. Dimensions RM baselines flow to Dimensions CM, and Dimensions CM baselines flow to Dimensions RM, providing the complete picture from requirement to deliverable.

Release Tracking
Creating builds and deploying software takes care of internal deliverables. However, many enterprises need to support end customers who in turn make use of delivered software, either directly or via OEM agreements. Keeping track of which customers are entitled to which configurations of products can be complex and time consuming. Dimensions CM supports the tracking of baselines and releases to end customers, removing a potential break in the chain of information needed to deliver world class customer engagement.

Learn more at www.microfocus.com/opentext