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# **ALM Octane**

### Enterprise DevOps platform for continuous delivery and quality

#### **Product Highlights**

#### Faster Delivery, Better Quality

Micro Focus® ALM Octane provides a comprehensive DevOps management platform that supports enterprise application delivery with high-quality criteria, continuous visibility and delivery across your entire application lifecycle. ALM Octane accelerates Agile transformations for high-quality application delivery at enterprise scale while leveraging existing investments. The Agile and DevOps platform integrates with open source and third-party solutions to support planning, build analytics, end-to-end traceability, and rich reporting.

#### **Key Benefits**

ALM Octane has many capabilities that help application development teams deliver amazing apps fast, without compromising quality or digital user experience. The three core aspects that bring speed, quality, and scale for application development, application testing, and application delivery are highlighted as follows.

#### Speed

ALM Octane is architected to immediately add value on top of widely adopted open source developer and collaboration tools. Teams have embraced Agile development practices and are building out DevOps tool chains leveraging powerful Git version control, Jenkins build, Azure DevOps and continuous integration (CI) systems. ALM Octane expands their value by managing not only the Agile backlog but also providing test management solution for all types of tests. This is needed to provide a remarkable user experience including manual and automated functional tests, performance tests, defects, and incidents both found in testing and production. Through a rich integration with Cl tools such as Jenkins, TeamCity, and Bamboo, at any time in the Cl pipeline process, you will have a clear and accurate view of quality and release readiness against the metrics that matter most to business.

By leveraging Git for source control and version management of tests, testers align with developer practices. The teams have the agility that comes from a clear view of testing changes and versions, ready to execute or roll back as needed.

In addition, ALM Octane provides a clear path for manual testers to skill up and transition to a world of dev/testing and test automation. ALM Octane supports Gherkin for Behavior Driven Development, a proven software development and testing methodology that leverages a simple, domain-specific scripting language converting structured natural language statements into executable tests. With BDD, business analysts can write Gherkin tests clearly reflecting business requirements, and testers can manually execute these tests or quickly convert Gherkin tests into automated scripts helping to accelerate the adoption of test automation. ALM Octane is designed to bridge the gap between traditional testing activities and developer practices to shift testing left and adopt DevOps best practices.

#### Quality

ALM Octane implements continuous quality in DevOps software delivery. ALM Octane is designed for fast-moving App Dev and test teams that are adopting CI for DevOps. Test execution is intrinsically linked to CI and results are automatically available in ALM Octane contextdriven quality and defect management dashboards or linked to contextual conversations

#### **Quick View**

ALM Octane is a comprehensive lifecycle management solution focused on enhancing the speed, quality, and scale of delivering software for organizations adopting Lean, Agile, and DevOps delivery practice.

Online ALM Octane help center ALM Octane Practitioners Forum Micro Focus Live Network in #ChatOps systems such as Slack. In addition, ALM Octane manages the relationships between all the moving parts in a DevOps pipeline. Teams can define their applications in modules that:

- Reflect architecture and dependencies
- Define user stories and tests that align to application modules
- Code and test in pipelines

Moreover, at any time know the status of testing results and defects aligned to particular builds in the pipeline or correlated up to the overall application module to get a comprehensive view of quality.

ALM Octane DevOps ALM solution is integrated with development and code quality solutions (such as Micro Focus Security Fortify Static Code Analyzer [SCA]) such that when code is checked in, it can be analyzed for code quality.

ALM Octane is fully integrated with continuous integration infrastructure (such as Jenkins, TeamCity and Bamboo). This enables the results of the build tasks and automated functional, performance, and security tests (such as those automated by Micro Focus LeanFT, Micro Focus StormRunner Load, and Micro Focus Security Fortify WebInspect) be reported in intelligent ways to the teams who need to act on the results.

Testing and quality insights are reflected and related to the builds, pipelines, and application modules in ALM Octane so that Agile teams can continuously assess the state of quality in the sprint. ALM Octane also relates quality and testing state to application architecture—via application components or modules—assessing if quality can meet definition of done.

In addition, ALM Octane captures the testing and quality data. It can enable a wide array of prebuilt and custom graphs and reports are created and rendered to align to KPIs, trends, and highest impact areas. Over time, we plan to continue to apply Big Data analytics against all this data. This is also done so that predictions can be available to make adjustments to continuously increase quality and lower risk.

#### Scale

ALM Octane is designed for transformative hybrid infrastructure. What do we mean by that? ALM Octane provides insight, analysis, management, automation, and orchestration for all aspects of application quality including user experience, functionality, performance, and security. Our solutions support all Software Development Lifecycle (SDLC) methodologies including Waterfall, Agile, and DevOps for continuous delivery as well as the needs of enterprises globally transitioning to hybrid infrastructure. These include on-premises, private cloud, as-a-service, and cloud-native platforms and delivery models.

With enterprise scalability and support, we are leveraging over a decade of industry leadership supporting the enterprise. With ALM and Micro Focus Quality Center, we have architect scalability, enterprise credential support, cross-project sharing and visibility, and flexible methodology support to the ALM Octane platform. Teams can start small and know that as they grow, the underlying technology will support them along the way.

When you are looking for scale, ALM Octane is designed intrinsically for hybrid cloud—to run as software as a service (SaaS) managed by Micro Focus or on-premises. Moreover, ALM Octane is an enterprise-class platform, with support for customized business rules, userdefined fields, and a Swagger documented Representational State Transfer (REST) application program interface (API) that is leveraged to integrate with full lifecycle services. With ALM Octane integrations, teams can collaborate rapidly through ChatOps and immediately reflect them in backlogs and Agile sprints, helping the DevOps continuous assessment feedback loop so vital to achieving consistent quality in a rapidly changing landscape. ALM provides Application Lifecycle Intelligence, which brings in data from SCM providers (Git, SVN, so on), CI servers (Jenkins, Bamboo, TeamCity), and monitoring tools (New Relic, AppDynamics). ALM Octane embeds a realtime pipeline view for continuous testing and continuous integration processes.

ALM Octane leverages modern ways of maintaining relationships between lifecycle activities and artifacts. It drives focus in teams with tagging and intelligent search so that teams can rapidly find the information needed to collaborate on quality and code readiness at any time.

#### **Features**

**Plan:** Predictable application delivery requires awareness of progress and alignment with goals and milestones, as well as the ability to access updated information without relying on error-prone manual data gathering. ALM Octane platform allows teams to assess the status quickly within their context and access the right data to make the correct decisions. When beginning a product, and on a continual basis, the product owner creates and maintains the product backlog. The Backlog is fluid, always adjusting to changing priorities.

In ALM Octane, the backlog is maintained in the Backlog module (see *Figure 1*). Use the Backlog module to:

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Figure 1. Backlog view within ALM Octane

- Create **Epics** that specify the large-scale part of your applications
- Create **Features** for each deliverable part of the product
- Create Stories for each item that must be developed
- Organize Epics, Features, and Stories in a meaningful way that displays your product development logic and hierarchy

Once you have created the product backlog structure, you can decide when to develop and release different items.

**Define:** Understanding business needs is the most critical piece of data any project team can have. ALM Octane has integrated Agile user stories and backlog management directly into the ALM software platform. Through this, teams can quickly document business needs and map them to supporting artifacts in the software development lifecycle, such as defects or tests. When planning a release or a sprint or development period, effective planning requires you to assign the correct amount of work for the capacity in these periods (see Figure 2).

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Figure 2. Team Backlog view within ALM Octane

To help you determine and assign work accordingly, each team is assigned a sprint velocity, which determines the overall release capacity. In parallel with this, each story (user story, quality story, and defect) is estimated in story points. When you complete these estimations, you can better create optimal work plans for a release and sprint. **Build:** High-velocity teams realize that a quick understanding of what went into a build and where to triage is an effective means to faster application delivery. ALM Octane integrates directly into your Jenkins CI and build environment, so you can quickly view release and quality pipelines, as well as adjust as new or changing validations and regression tests are created (see Figure 3).



Figure 3. Pipeline view within ALM Octane

**Test:** Consistent quality is critical in any application being delivered to support your business. ALM Octane platform allows you to author tests using Gherkin (*see Figure 4*), assists in the conversion of automated scripts, and manages the execution of your test suites. You may also manual test by defining step by step. Whether you're planning your tests within the context of a CI pipeline or executing regression tests on the fly, with ALM software, you can view aggregated quality within the context of your entire application.

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Figure 4. Gherkin test view within ALM Octane

**Track:** Whether you want to log a defect quickly and easily—during a regression test, or review the status of a test or user story,



Figure 5. Dashboard view within ALM Octane

ALM Octane provides information tailored to your context. Customizable reports, graphs, and dashboards (see Figure 5) help the team stay on top of critical items and with prioritization. The dashboard is the control center for analysis of your application's development and quality. It gives a visual, customizable display of how the application's development is progressing and the level of quality. When you add widgets, you can control the information shown in the dashboard such as the type of data reported, the scope, and time frame, and how the data is grouped and displayed. In one dashboard, you have complete visibility of all aspects of a project, release, or applicationfrom progress to quality.

**Embracing open source:** ALM software continues to embrace open source standards and tools within the framework. You can author tests using Gherkin, support test automation management of Selenium scripts, which is based on a Git-architected back-end platform, and tightly integrate with your team's Jenkins build environment.

**Business rules:** To allow teams to provision workspaces and environments quickly, as well as simplify the administration of the system, ALM Octane introduces visual business rules. This helps teams to control access, enforce process and workflow, and to align with team priorities consistently. The most beneficial process assistance comes through productive guidance, rather than obstructive blocking.

## Contact us at: www.microfocus.com

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Asset sharing, reuse, and tagging: Being able to share similar artifacts between teams or projects doesn't just help save time and lower risk but is a very common reality for many teams today. Using application modules within ALM Octane, teams can easily assign tests, defects, and user stories to a specific application release, and can use custom tagging that quickly filters and views items across the lifecycle.

Learn more at microfocus.com/alm-octane

