

Cog Gears

Accelerating project delivery,
improving project quality



Great developers don't build everything from scratch. Instead they're masters at orchestrating tested code and focusing their energies on creating new value. The Cog Gears toolbox is a repository of tested tools that reduce project set-up times and eliminate the common tasks and challenges that are encountered across all AEM projects.

These tools dramatically accelerate and improve the quality of any project using Adobe Experience Manager (AEM). This means you get far better quality projects, with fewer errors, delivered on time, from highly engaged developers who can take the time to produce the best results.



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OPEN SOURCE TOOLS

Cog Gears includes a growing number of open source tools and libraries that are free for you to use, or even to contribute code towards. Below are some examples from the extensive list. All of these tools are available for download from the Cognifide Github repository here:

www.cognifide.github.io

Carty

If you have multiple content branches on your AEM platform, such as multiple language sites or multiple brands, using content across branches can be complex and time-consuming to set up. Carty allows you to map content from one branch to another, avoiding long and complex URLs. All you do is enter the domain URL you want to create and the content path, and Carty takes care of the rest. Carty makes it much easier to shorten URLs to be usable and memorable while saving on developer and testing time.

Key Benefits

- Improve customer experience with short, easy-to-remember URLs.
- Save time by managing and testing URLs quickly and easily.

AEM Unix Toolkit

Adobe Experience Manager is a highly configurable platform. While this makes it powerful, it's also complex to set up. The AEM Unix Toolkit can be used to automate the initial configuration, saving a substantial amount of time. It also enables developers to do a health check on any code they are going to apply to the platform, to ensure it will work. This means your projects can start faster and developer time is focused on delivering value.

Key Benefits

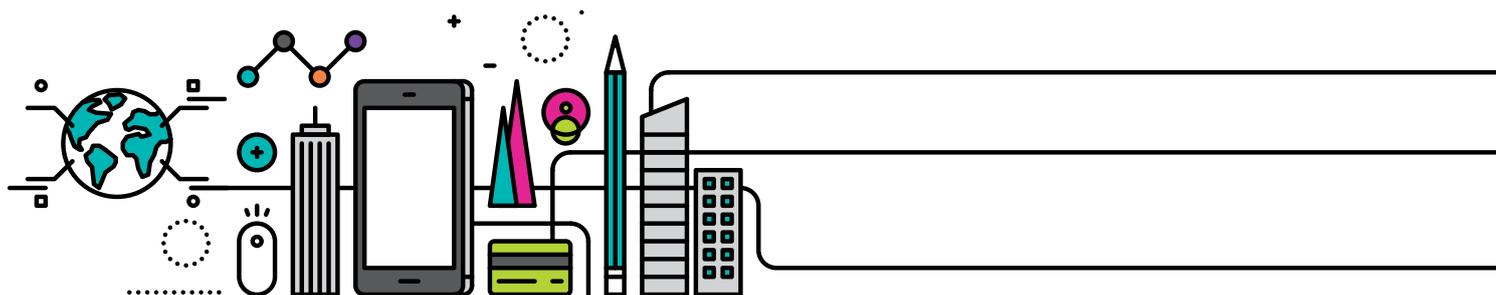
- Spend less time setting up your AEM projects.
- Focus on delivering improved customer experiences.

AEM Actions

When you have a functional website where visitors are undertaking actions such as creating their own content or setting up user accounts, it's very easy for your authoring instance to get out of sync with your published instance. If you are running multiple publish instances for resilience and load balancing, these can also get out of sync. AEM Actions is a library that helps your authoring instances to remain in sync with your publish instance by setting up automated 'reverse replication' from publish to author.

Key Benefits

- Improve customer experience by keeping all instances of AEM in sync.



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Secure AEM

When AEM is installed out of the box it comes with a host of default configurations that are exposed to the Internet, such as default usernames. This creates the possibility for attackers to gain authoring or administration access to the AEM platform, which represents a significant security and reputational risk. Secure AEM is a dedicated package that can test for typical configuration errors and ensure that your AEM instance is protected from common security issues.

Key Benefits

- Protects your AEM platform from common security issues.

Jmeter AEM Templates

Setting up a plan to test the performance of Adobe Experience Manager and the sites that sit on it can take time. Jmeter AEM Templates is a set of pre-defined test plan templates for undertaking a full suite of performance tests. It's specifically designed for AEM and can test both the authoring and publishing instances of your AEM platform.

Key Benefits

- Speed delivery and reduce costs of establishing a test plan.
- Ensure thorough performance testing of your AEM instances with a comprehensive test plan.

PROPRIETARY AND IN-HOUSE TOOLS

The following tools are primarily used in-house, or may be in the process of being open sourced.

AEM Commons

Most developers cut and paste code from previous projects to save time and avoid repetition. The problem with this approach is that it's hard to manage versions, and there is no documentation or management of the lifecycle. It also means the latest client project can be infected with bugs from previous projects for other clients. Cognifide uses AEM Commons as a managed repository for tested code that is proactively managed and made consistently available. This code is also made available to clients via Zen Garden.

Key Benefits

- Less time and money spent on re-writing code.
- Less time and money spent on fixing bugs.
- Higher-quality user experiences.



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AEM Project Archetypes

When starting a new AEM project, setting up the environment and structure of directories can consume days of valuable project time. AEM Project Archetypes use standardised templates to get projects up and running faster. Although AEM offers out-of-the-box archetypes, the Cognifide archetypes are designed to align exactly with our standards and processes. Combining them with our latest Gradle AEM plugin means we're able to halve delivery times to clients.

Key Benefits

- Dramatically reduce project set-up times.
- Dramatically accelerate project delivery.

AEM Internal Cache

If you're running a web site - or multiple sites - which rely on a lot of external data and elements, then you may suffer from reductions in both page load and site performance. AEM Internal Cache enables you to reduce the workload required to deliver your web experiences and to greatly improve site performance.

Key Benefits

- Improve user experience with faster page load times.
- Reduce server workload and save cost.

AEM Notification Tool

Sometimes it's useful to be able to send a message to all authors on your AEM platform, no matter where they are; to advise a global team of contributors of a planned maintenance window, for example. AEM Notification Tool is a simple tool that allows you to display a message to all authors in the authoring instance.

Key Benefits

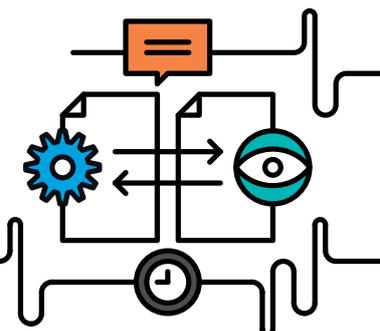
- Improve collaboration and coordination between AEM users.
- Improve project planning and avoid unnecessary downtime.

AEM Mass Replication

If you are working on a large project or need to make large-scale content changes to your web properties, then moving all this content from the authoring instance to the publish instance of AEM can take a long time. That's particularly true if you're activating each page individually. You could use the 'Activate Tree' function of AEM, but this still works sequentially and can take several seconds per page, meaning a 5000-page update could take hours to be published. AEM Mass Replication bulks up the changes into a package that is published all in one step, meaning less time spent waiting.

Key Benefits

- Accelerate project delivery speed.
- Avoid unnecessary developer downtime.



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AEM Webservice Module

If your web site relies on integration of web services from non-RESTful legacy systems dependent on Java web services (Apache CXF), then AEM Web service Module makes your life easier. It allows for much simpler and faster integration of web services into Adobe Experience Manager. Alternatively, you can check out Knot.X for integrating multiple services.

Key Benefits

- Save time and cost by reducing the work required to integrate legacy systems and platforms into Adobe Experience Manager.

AEM Minifier

Removing unnecessary code, reducing spaces and shortening variable names all enables you to improve page load performance. Although Adobe Experience Manager has its own default minifier, it wasn't updated for version 5.x and was only recently refreshed for AEM 6.3. This means that older versions of AEM may not account for some newer Javascript code. AEM Minifier fixes this issue by allowing you to 'minify' javascript and CSS, and automatically divides the files into separate parts so they will still work with older versions of AEM.

Key Benefits

- Improve customer experience with faster load times and fewer errors.
- Improve the performance of your legacy AEM platform.

AEM Maintenance

Good quality web experiences don't just come from an effective development process. They also depend on constant management of the platform to ensure everything keeps running smoothly. AEM Maintenance is a comprehensive set of maintenance scripts that allow us to check if your AEM instance is working properly. These scripts can be used for daily monitoring of your platform, so you can have advance warning of anything not working as it should.

Key Benefits

- Ensure consistent quality of web experiences.

AEM Search

It's easy to overlook the complexity of implementing good quality search functionality, but poor search can seriously compromise the user experience. In just about every case, search needs to be highly configured and optimised for each site to ensure best results. This makes search time-consuming to build and means it's challenging to reuse components from one project to the next. AEM Search accelerates and improves the build of search functionality in two ways. First, it reuses components where possible. Second, it speeds up development and integration with third-party search platforms such as Apache Solr, Google Search Appliance, Microsoft FAST and others by reducing the time needed to write the code to integrate these tools. This means less time spent on building search and more time spent on optimising your customers' search experience.

Key Benefits

- Improve cost and speed of delivery by simplifying implementation of search.
- Improve user search experience with optimised search configuration.