



## Question & Answers from the CQ Gems AEM 5.6 Architecture Session

May 8, 2013

Questions	Answers
Where do we get this presentation deck?	<a href="http://adobe.com/go/gems">Adobe.com/go/gems</a> is a good entry point for all the material; including this presentation
Do we have this API in 5.5? Or has this been introduced in 5.6?	The Sling Resource API exists since the very beginning of CQ5. The persistable capability has been added lately. Its available as of 5.6.
Would it be possible to deploy the sling resource API 2.2.x implementation in CQ 5.5?	This is possible, but requires several bundles to be updated. If someone wants to do this, the best version to use are the bundles from CQ 5.6.1
Let me rephrase. In my understanding in 5.5 we had only one API to work with which gave us some sort of session to access the repository and this caused certain bottlenecks/resource contentions. From a previous slide where we spoke about persistability - I understood that this is some sort of cached API which does not makes calls to underlying CRX all the time hence I presume this will increase performance. I want to understand this a little more. Maybe if this is not the right form, I can reach out offline - let me know how?	That is not entirely true. The session API of JCR also caches the data until the session is saved. The resource API does the same. It does not keep a cache over the lifespan of a request. The Resource API is a simplified abstraction on-top of the JCR API which is engineered towards AEM use. It leaves omits much of the JCR API (such as locking, access control, versioning) but adds required features to implement AEM request processing infrastructure (such as the resource type and super type or the Adaptable interface)
We had a hard time finding any documentation on how to install/use other (JSR-223) scripting languages in CQ5. Where can I find this information?	The best place for this is to ask the apache sling dev and user mailing lists. See <a href="http://sling.apache.org/">http://sling.apache.org/</a> for pointers. I found this example (but I haven't verified it myself) <a href="https://cwiki.apache.org/SLING/using-scala-with-sling.html">https://cwiki.apache.org/SLING/using-scala-with-sling.html</a> Agreed, we should do better. There is a crude page on this topic, though, at <a href="http://sling.apache.org/old-stuff/scriptengineintegration.html">http://sling.apache.org/old-stuff/scriptengineintegration.html</a> . The actual integration code is at <a href="http://svn.apache.org/repos/asf/sling/trunk/bundles/scripting/core/">http://svn.apache.org/repos/asf/sling/trunk/bundles/scripting/core/</a>
What is the purpose of suffix?	A couple of links that provide some more explanation on it: <a href="http://sling.apache.org/site/url-decomposition.html">http://sling.apache.org/site/url-decomposition.html</a> and <a href="http://dev.day.com/content/docs/en/cq/current/developing/sling_cheatsheet.html">http://dev.day.com/content/docs/en/cq/current/developing/sling_cheatsheet.html</a>



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How do JSP extensions still work after porting everything to OSGI?	<p>Sling has a built in jasper compiler.</p> <p>JSP is looked at like any other scripting language we support and is integrated through the JSR-223 Java Scripting API integration. The code is at <a href="http://svn.apache.org/repos/asf/sling/trunk/bundles/scripting/jsp/">http://svn.apache.org/repos/asf/sling/trunk/bundles/scripting/jsp/</a></p>
What if I want to offer a custom extension? Say PDF.	<p>Then you create a script or servlet that responds to PDF. We have great support for generating PDFs (being Adobe :-)</p>
Is there any performance penalty of using the Sling API versus using directly JCR API - especially for a high number of read operations?	<p>No, the resource API is very thin and does not impose any performance implications.</p>
Do we have plans to integrate Jackrabbit oak in 5.6 ?	<p>I don't think so.</p> <p>Oak is part of AEM 5.6 in the form of a technology preview. AEM 5.6.1 will provide an improved, but still technology preview level, implementation. This is not production use yet!</p>
How can I use CQ to store static html page?	<p>You put the static html page in the repository as nt:file and then you can access it naturally.</p>
Other than scripting in JSP, can we script in any other languages?	<p>You can use any language that has support in sling. IIRC we have ootb support for JSP and ECMA.</p> <p>In addition Sling provides integrations in the <a href="http://svn.apache.org/repos/asf/sling/trunk/contrib/scripting/">http://svn.apache.org/repos/asf/sling/trunk/contrib/scripting/</a> source tree for Freemarker, JST, Python, Ruby, Scala, Velocity, and XProc. The Groovy-all bundle from the Groovy project can be deployed unmodified.</p>
How can author use this feature apart from webdav?	<p>Do you mean to allow authors to upload html? Yes, this can be done via webdav.</p>
I meant other ways than webdav?	<p>You can access the repository also via JCR remoting, but I don't think this is useful for authors. For DAM pages, you can drag-drop images into the user interface in order to upload. This certainly can also be done for html page.</p> <p>Sling has a prototype implementation for FTP Server access at <a href="http://svn.apache.org/repos/asf/sling/trunk/contrib/extensions/ftpserver/">http://svn.apache.org/repos/asf/sling/trunk/contrib/extensions/ftpserver/</a>. This can be deployed into AEM (but has not been thoroughly tested yet).</p>



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Will Jackrabbit OAK support any equivalent to Jackrabbit-OCM?	IIRC, Jackrabbit-OCM is purely based on JCR. Since Oak is a JCR implementation, OCM should work as well.
Did we do anything in dispatcher?	Support for https connection (from disp to cq) and many bugfixes.
Is there any support for Reports Scheduling in CQ? E.g. If I want to generate custom report on some content and mail it weekly to some admin users.	Yes, with the report builder together with scheduled workflow tasks, this is possible.
Does the platform support saving static assets in let's say Amazon S3?	An Amazon S3 DataStore implementation is currently available as a beta. In the near future support for Amazon S3 DataStore will most probably be part of the product. This assumes the S3 store is managed by the JCR implementation (Jackrabbit/CRX or Oak) If you want to manage your assets outside of the repository (which we do not recommend), you might consider writing an S3 ResourceProvider which provides access to the assets through the Resource API. The recommended way of using S3 is by means of a DataStore and have it managed by Jackrabbit/Oak.
I have upgraded my CQ 5.5 with CQ 5.6 2012 Dec build. I have also notice that you guys have released a 2013 Mar build. Can I know what the difference between the 2 builds is?	The Dec build is a pre GA build, so this is not the 5.6 GA; as we did bug fixes and improvements between that load and the GA, it's advisable to install the 5.6 GA instead.
Speaking of Oak, is the support for MongoDB in Oak experimental only, or are there any plans for AEM to move away from a custom JCR implementation and use a noSQL product like MongoDB?	For the future, the current plan is to have an own high performance implementation for single instance installations. For clustered installations, MongoDB will be used.
Can you talk about the FileVault tool (VLT) vs. WebDav	Webdav is a standard protocol support by many operating systems and tools. It allows to browse the repository and access files. VLT is a command line tool specifically designed for a JCR repository. It allows you to export, import and update content with the repository. Not just files, but all nodes and properties.



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Can we store pages from other apps to my repository and update the same when other app update the page?	The question is unclear: What does "other apps" mean? The recommended way to deploy custom applications on the AEM platform is as an extension to the AEM platform as collections of OSGi Bundles and Content [Packages]. As such these applications have direct access to the repository.
Do we have good documentation to extend Felix console?	The Web Console is an Apache Felix open source project whose documentation can be found at <a href="http://felix.apache.org/documentation/subprojects/apache-felix-web-console.html">http://felix.apache.org/documentation/subprojects/apache-felix-web-console.html</a> .
Scala support in Sling - Is it production ready or more of experimental in nature? Does AEM 5.6 supports S3 or is it another version	Scala support is not production ready
What are the multichannel data support on AEM 5.6?	Within AEM 5.6 these are mobile, dps (digital publishing suite) and html.
The .LESS CSS script language was recently added... however there seems to be no official documentation on this... just blog entries by various people. Is official documentation on using .LESS going to be released soon?	Check out <a href="http://lesscss.org/">http://lesscss.org/</a> ; respectively <a href="http://www.dotlesscss.org/">http://www.dotlesscss.org/</a>
It seems API has been changed in CQ5.6.	Which API? In general, a major release comes with new / additional API; however there shouldn't be any incompatible changes.
Which version of Rhino is bundled in AEM 5.6?	Rhino 1.6R6
Can we override standard servlet with our custom servlet completely?	Yes
com.day.cq.workflow has been updated with com.adobe.granite.workflow do we have any documentation on these api changes?	Please check out: <a href="http://dev.day.com/docs/en/cq/current/release_notes/overview.html#Links">http://dev.day.com/docs/en/cq/current/release_notes/overview.html#Links</a> and: <a href="http://dev.day.com/docs/en/cq/current/diff-previous/changes.html">http://dev.day.com/docs/en/cq/current/diff-previous/changes.html</a>