

Introduction to Documentum REST Extensibility

Overview

Before Documentum REST Services was released, the major platform APIs for Documentum were DFC and DFS, which all provide the extension solutions for users to build custom APIs for business applications. There is also the requirement, at the birth of Documentum REST Services, to provide the extensibility capability for users to add custom REST APIs for Documentum, besides the out-of-the-box (OOTB) resources. There are several advantages for the REST extensibility.

- Accelerate to the REST paradigm for Documentum users

The REST API is more favourable for mobile and new web applications. A lot of Documentum users have been familiar with the REST APIs. But the construction of the Documentum custom REST APIs is still something new to most users. The open for Documentum REST extensibility can help users to leverage the built Documentum REST infrastructure to develop REST APIs fast.

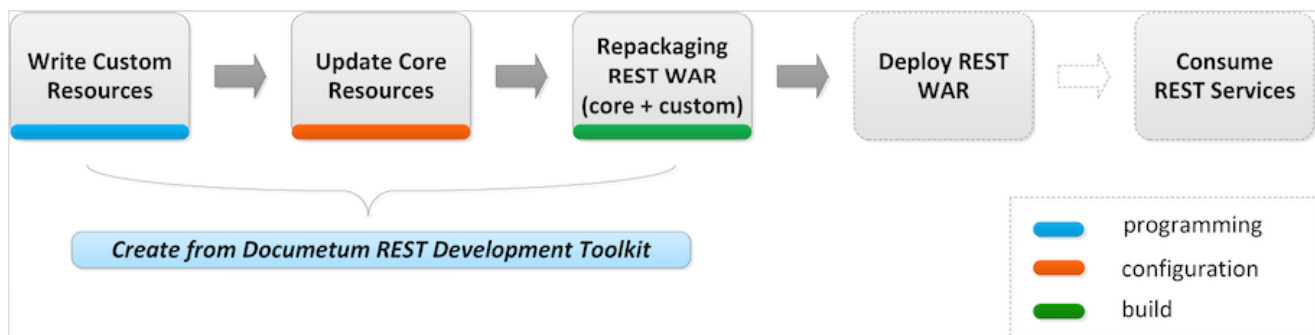
- Add capability to the APIs beyond Core REST deliverables

Documentum REST Services ships a set of OOTB resources for the core enterprise content management in Documentum. However, some advanced features are not implemented yet in the REST services, for instance, retentions, content transformations, etc. The extensibility enables users to build REST APIs for specific functionalities that were not provided by the OOTB Documentum REST Services, and bring new features to users' market quickly and frequently. Users also know best for their business models, and have the desire to make the business models RESTful. But there is lack of the development kit to build Documentum REST APIs for customer business models.

Documentum REST Services 7.2 is a new release that provides the extensibility development toolkits for users to build custom REST APIs.

What is Documentum REST Extensibility

Documentum REST extensibility is an API infrastructure that enables users to extend Documentum REST Services by composing, customizing, and creating new REST resources. These newly-created resources are finally discoverable from the Home Document, existing core REST resources, or new custom resources via hypermedia relations. By wielding the power of resource extensibility, users can tailor Documentum REST Services to their needs with limited amount of coding. The following diagram illustrates the lifecycle of custom resource development.



Users take the Documentum REST Software Development Kit (SDK) and start the custom REST development, either for creating new resources, or customizing resources, or both. The SDK allows users to add below extensions.

- Design and implement custom resources

The main objective of the REST extensibility is to add custom resources to build a rich-functioned web application, except for the OOTB core resources. Documentum REST Services provides users with a set of toolkits and libraries to facilitate the programming of custom resources, which are:

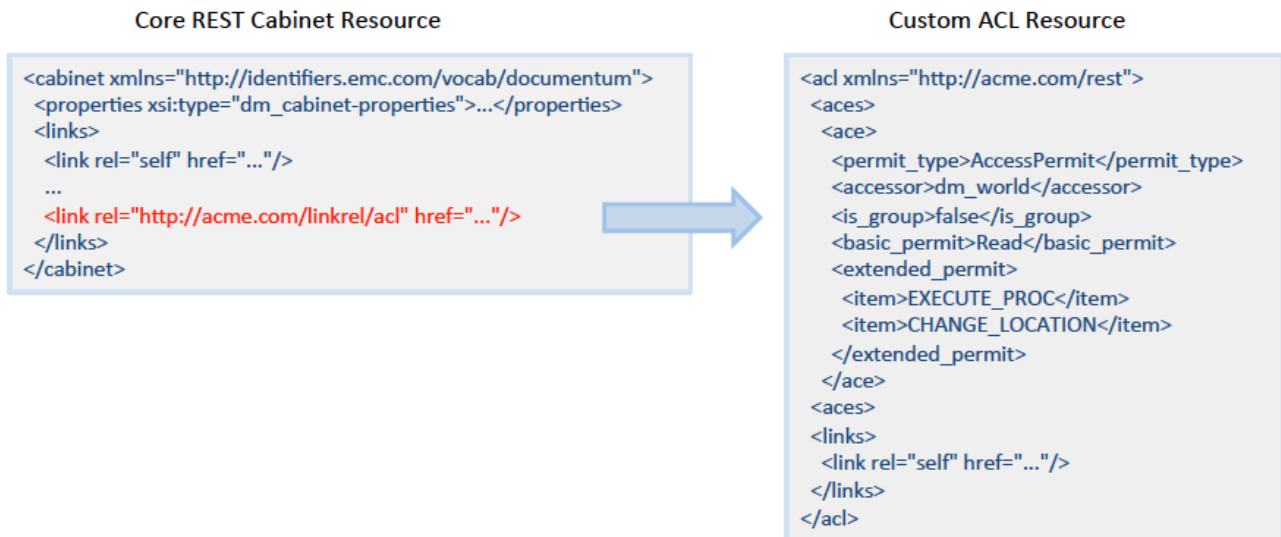
- A set of Core REST Java libraries for custom resource development which optimize the REST services development upon core REST services. Java docs and code samples for the shared library are also provided.
- A marshalling framework which frees users from writing codes to handle the XML and/or JSON message marshalling and unmarshalling in a coherent way with Core REST resources.
- A Maven-based toolkit to manage the build process of custom resource projects. An archetype is included to create a sample project for user domain.
- An Ant-based toolkit to manage the build process of custom resource projects.
- A lot of code samples for the custom resource development.
- Customize Core REST resources

Typically, the newly developed resources need to interact with Core resources via link relations or other representations. Documentum REST Services provides you with a number of features to customize Core resources.

- Add topmost custom resources to the Home document. Topmost resources are those resources that do not link from other resources.
- Add new link relations to Core resources. The newly developed resource can be a forwarded state of a Core resource, so that the Core resource needs to give a link relation to the new resource.
- Repackage the REST WAR file

Documentum REST Services provides the build toolkits and scripts to build custom resources and Core resources into a single WAR file.

Here is an example of the result of the extensibility development. By composing core Cabinet Resource and creating a new ACL resource. The new REST API will have below resource representations.



Further Readings

- [Documentum REST Extensibility Tutorial \(1\): Install Documentum REST Artifacts](#)
- [Documentum REST Extensibility Tutorial \(2\): Create A Sample Project](#)
- [Documentum REST Extensibility Tutorial \(3\): Explore The Sample Project](#)
- [Documentum REST Extensibility Tutorial \(4\): Create Object](#)
- [Documentum REST Extensibility Tutorial \(5\): Update and Delete Object](#)
- [Documentum REST Extensibility Tutorial \(6\): Make Resource Query-able](#)

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- [Documentum REST Extensibility Tutorial \(7\): Make Resource Batch-able](#)
- [Documentum REST Extensibility Tutorial \(8\): Create A Root Resource](#)
- [Documentum REST Extensibility Tutorial \(9\): Create Persistence Managers](#)
- [Documentum REST Extensibility Tutorial \(10\): REST Error Handling](#)
- [Documentum Platform REST Services 7.2 Development Guide](#)

[Learn more about Documentum REST Services >>](#)