

# API improvements

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- Resource refactoring into a lower-level class (Handler) and more clearly defined higher-level methods. Representations' content can now be exposed via BIO Readers and Writers.
- Many getters and setters were added to facilitate the integration with Spring.
- New modularization capabilities added. Components now have an internal router where applications modules can be privately attached. Communication between applications hosted under the same component or virtual host is now possible with a new internal connector named RIAP (Restlet Internal Access Protocol).
- Configuration of components based on pure XML is now directly supported. Sometimes it provides more flexibility than programmatic configuration, especially for administrators with no Java environment.
- Core XML support was improved to support SAX and DOM sources, SAX pipelining and more efficient XSLT transformations.
- The URI Reference class now enforces the usage of valid URI characters, supports matrix URIs as defined by Tim Berners-Lee and can manipulate file extensions.
- TunnelService was enhanced to allow optional processing of query parameters and to support customization of common user agent preferences via a properties file. For example, this allows you to bypass the default choice of Internet Explorer to prefer Word over HTML documents if HTTP content negotiation occurs.
- New TaskService to execute synchronous or asynchronous tasks using a thread pool whose life cycle is automatically managed by the application.
- Representation digests (MD5 and more) are now supported to ensure the integrity of data exchanged between clients and servers.
- HTTP DIGEST authentication (client and server side) is now supported and leverages the new authentication pluggability added to the engine.
- The logging facility has also been fully refactored to be more consistency and better organized.