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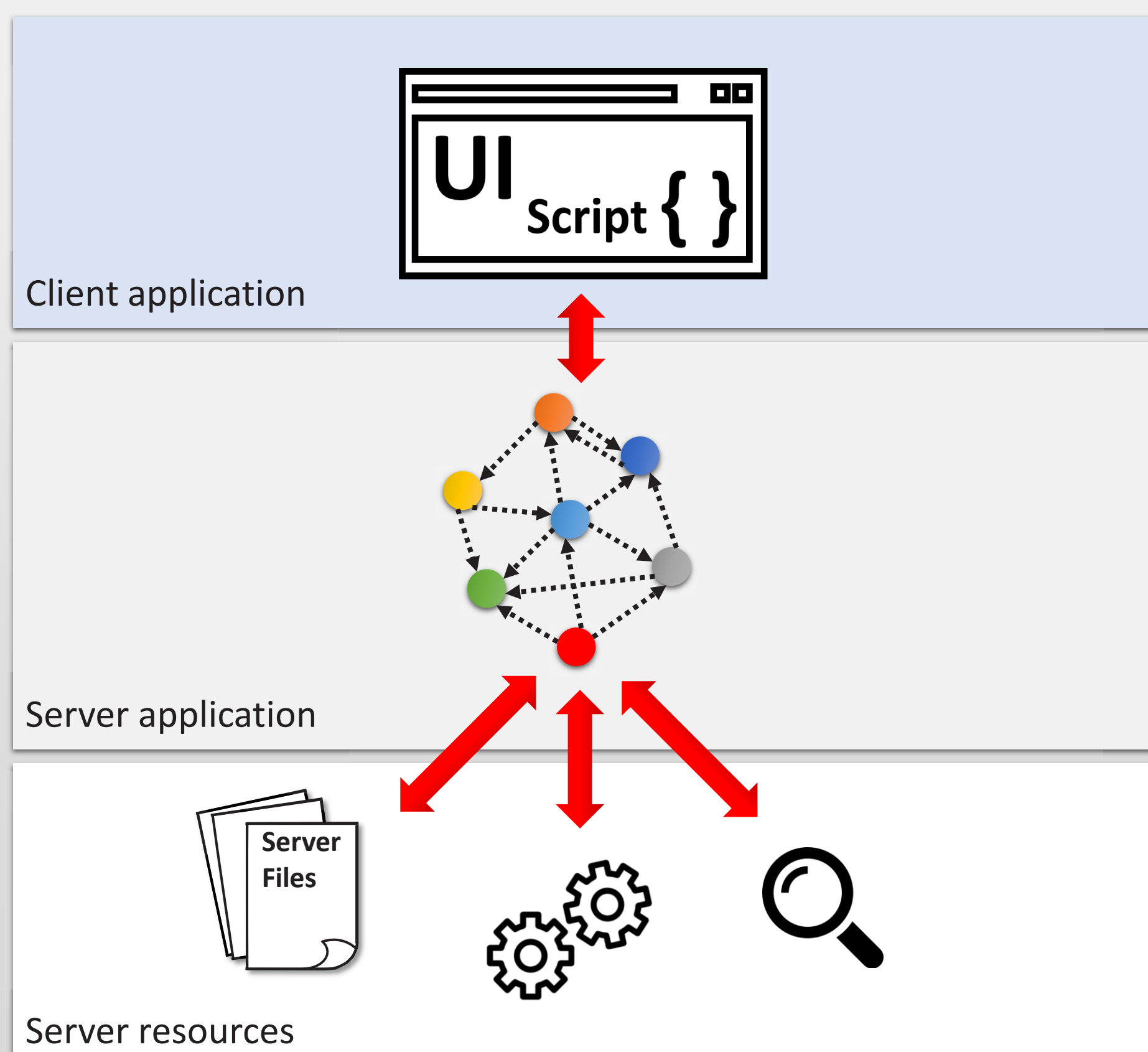
Use cases

INTRODUCTION

The CMS XML-RPC toolkit to build service-oriented software architectures using the SIMATIC WinCC OA [1] platform, complying with the standard specification of the XML-RPC protocol. The toolkit enables heterogeneous entities to act as service providers (servers) or service requesters (clients). The software models were prepared to support the following scenarios: Remote procedure calls from the Detector Control System (DCS) user interface (UI), service-oriented architectures and web services.

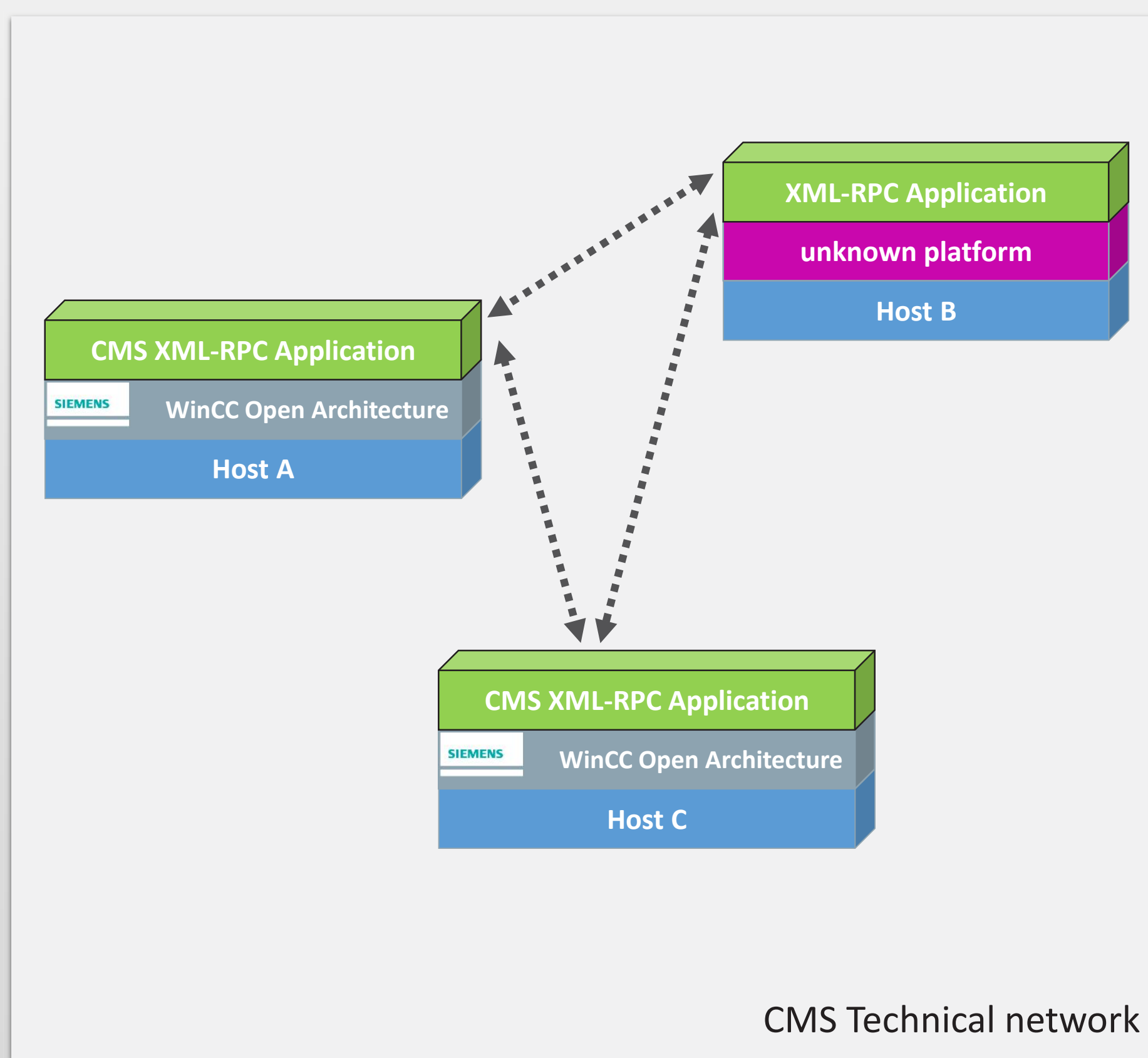
Remote procedure calls from User Interfaces

The CMS XML-RPC toolkit allows programmers to encapsulate server-only operations in form of service objects that can be invoked from the UIs.



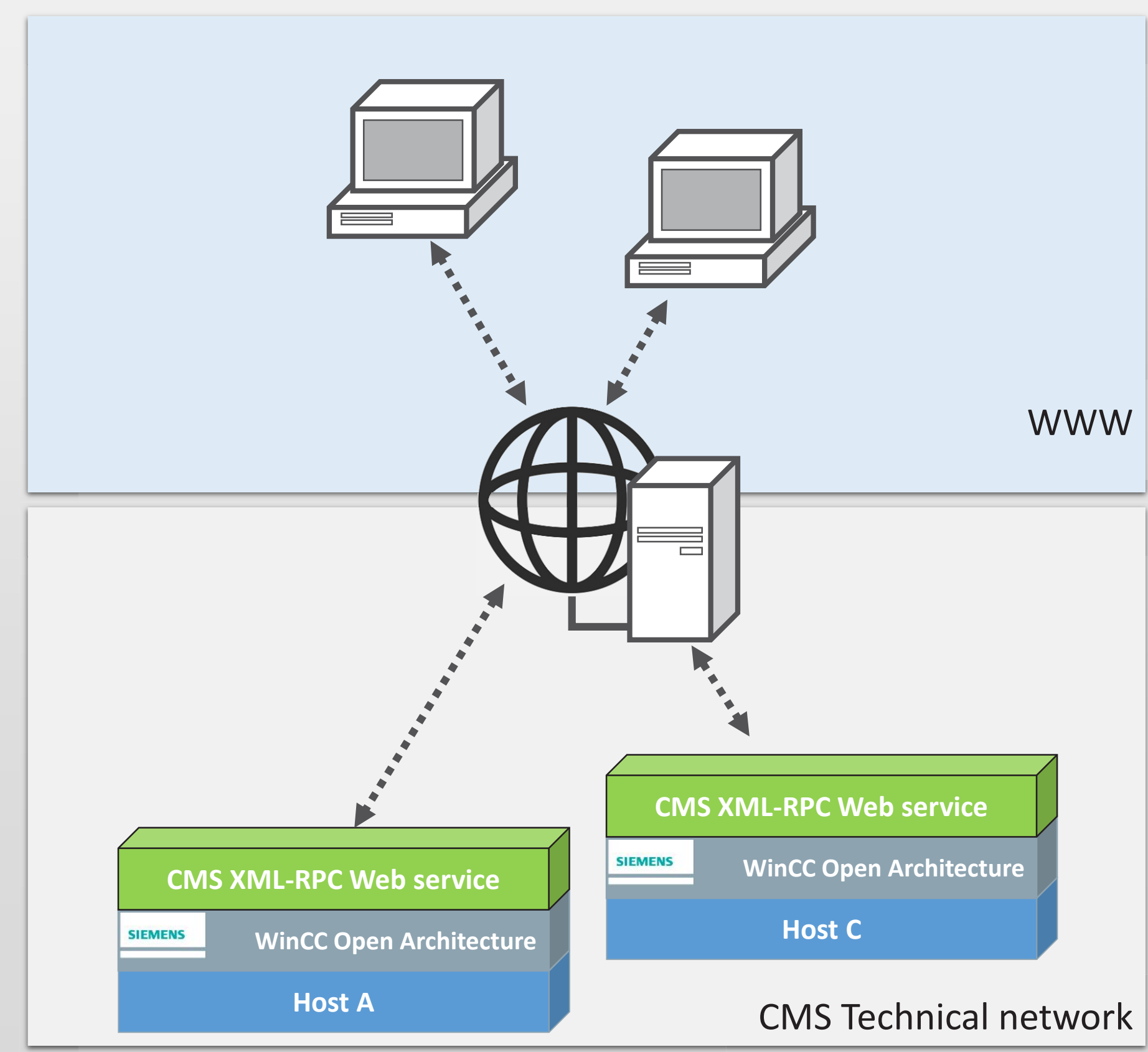
Service-oriented architectures

The toolkit permits modelling applications as service producers and consumers, and to connect applications on different platforms.

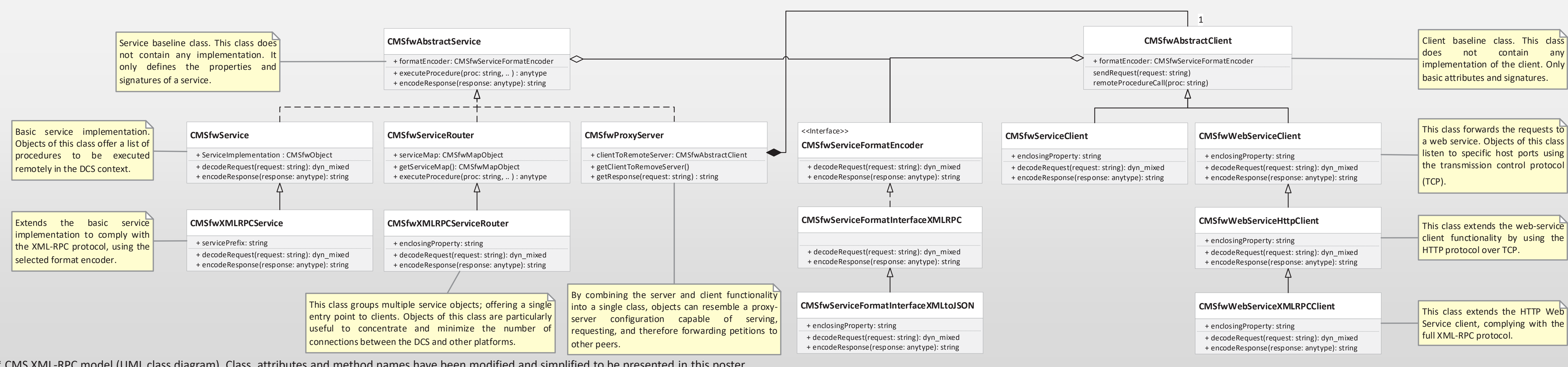


DCS web services

The toolkit complies with the standard XML-RPC specification using HTTP over TCP, offering a new set of control features to the CMS users worldwide.



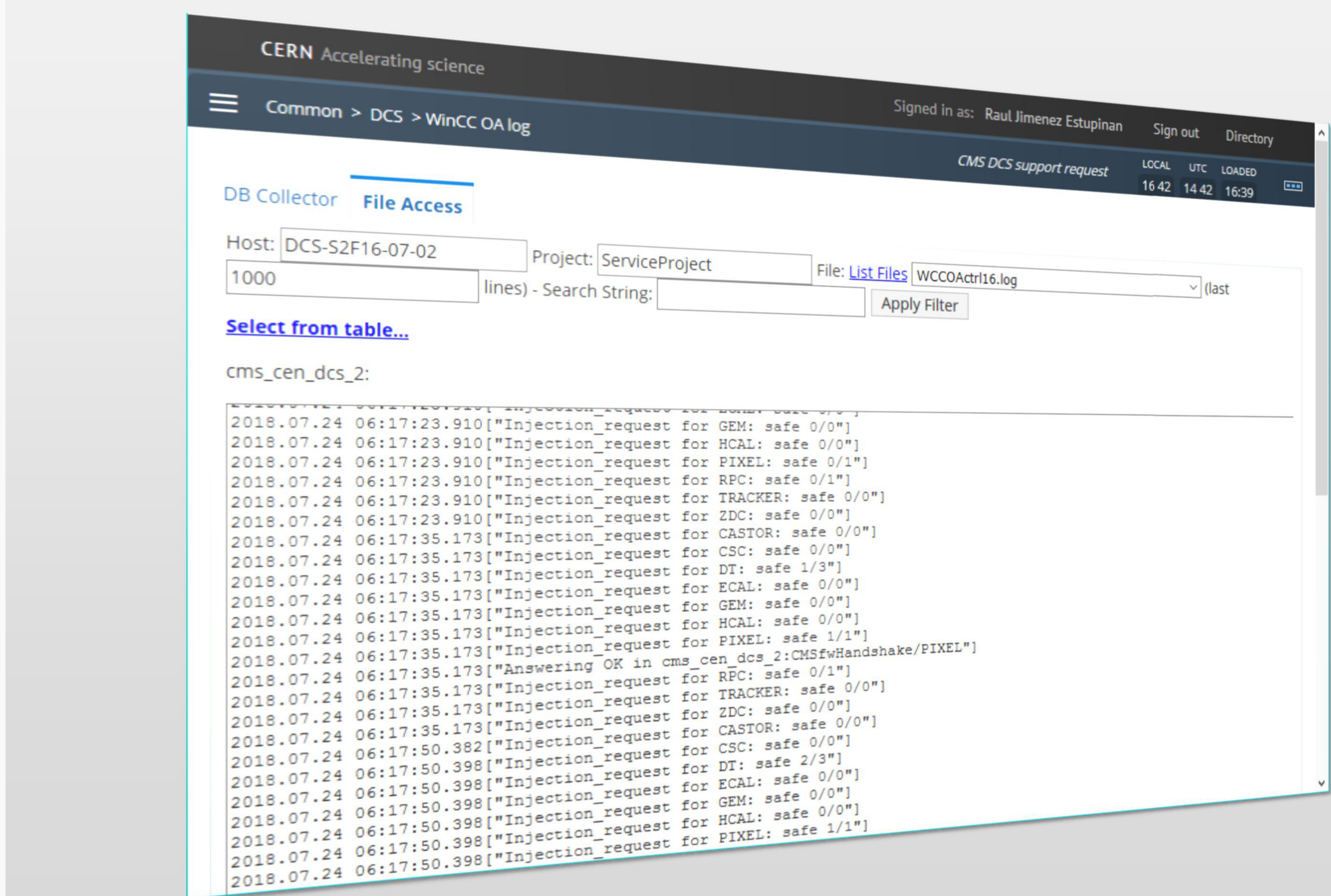
CMS XML-RPC software model*



Examples of web applications based on CMS XML-RPC

Online DCS log files browser

This web application exposes the different logs available in the remote nodes, and implements some formatting and filtering features to facilitate the readability.



Online parametrization browser

This web application connects to one of the CMS XML-RPC services and allows users to inspect and change certain parameters in the control systems.

