

Document Title	Demonstrator Design of Functional Cluster RESTful		
Document Owner	AUTOSAR		
Document Responsibility	AUTOSAR		
Document Identification No	904		

Document Status	published	
Part of AUTOSAR Standard	Adaptive Platform	
Part of Standard Release	R20-11	

Document Change History					
Date Release		Changed by	Description		
2020-11-30	R20-11	AUTOSAR Release Management	No content changes		
2019-11-28	R19-11	AUTOSAR Release Management	Removed generated API tablesChanged Document Status from Final to published		
2019-03-29	19-03	AUTOSAR Release Management	No functional changes		
2018-11-02	18-10	AUTOSAR Release Management	No functional changes		
2018-05-02	18-03	AUTOSAR Release Management	Initial release		





Disclaimer

This work (specification and/or software implementation) and the material contained in it, as released by AUTOSAR, is for the purpose of information only. AUTOSAR and the companies that have contributed to it shall not be liable for any use of the work.

The material contained in this work is protected by copyright and other types of intellectual property rights. The commercial exploitation of the material contained in this work requires a license to such intellectual property rights.

This work may be utilized or reproduced without any modification, in any form or by any means, for informational purposes only. For any other purpose, no part of the work may be utilized or reproduced, in any form or by any means, without permission in writing from the publisher.

The work has been developed for automotive applications only. It has neither been developed, nor tested for non-automotive applications.

The word AUTOSAR and the AUTOSAR logo are registered trademarks.





Table of Contents

1 Introduction				
	1.1	Used OSS components	4	
	1.2	Known limitations	4	
	1.3	Deviations from specification	4	



1 Introduction

This document describes the design (approach and decisions) of the Functional Cluster REST for AUTOSAR's Adaptive Platform Demonstrator.

The decisions taken for the AUTOSAR Adaptive Platform Demonstrator may not apply to other implementations as the standard is defined by the specifications. Nevertheless, the Demonstrator may supplement and ease the understanding of the specifications.

This implementation of Functional Cluster REST software provides a reference implementation that is meant to be used in prototype projects. The main goal here was to provide proofs of concept for ara::rest features specified in the REST specification of AUTOSAR Adaptive Platform. No static or dynamic code analysis has been performed, therefore any series production project deriving form this implementation, will have to further fulfill the safety constraints described in the industry standards.

1.1 Used OSS components

This sections lists all OSS components used in the implementation of the Functional Cluster, their architectural context and the rationale for their use.

OSS	Version	Explanation	Binding	License	License Version
RapidJSON	1.1.0	Used for JSON de-/serialization of payload	header only, static linked	MIT	-NA-
Poco	1.7.1	HTTP implementation	dynamic linked	Boost Software License	1.0

1.2 Known limitations

ara::rest::Events not implemented.

1.3 Deviations from specification