

**Title:** Arrowhead SysDD Test Consumer      Page 1 of 6

**Version:** 0.1

**Status:** for approval

**Date:** 20201210

**Author:** Gustav Hansson

**Contact:** gushan-6@student.ltu.se

# System Design Description (SysDD) Test Consumer

## Abstract

This document provides the main template for the description of Arrowhead Systems technological implementations. In this document the solution for the actual implementation of the System is pointed out.

This document is an optional one. If the actual implementation is not needed, the usage of the System Description document should be adequate to reveal the interfaces and services.

All Arrowhead Systems should be specified using this template and stored on a common repository (available in the SVN Server), in order to document and formalize the pilot demonstrators.

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# 1. System Design Description Overview

Table 1 System Information

<b>Name</b>	Test Consumer
<b>Owner</b>	Gustav Hansson

The Test Consumer provides an example on how to create a Consumer System using the custom Arrowhead C# Client library. The library has a Client and an Admin part where the Client is mandatory for service registration and orchestration whereas the Admin module is optional. The main functionality of the Admin module is to create intracloud rules and store entries in the Orchestrator. These can also be done manually via the API or using the Management Tools provided by the Arrowhead Tools project.

Table 2 Pointers to SysD documents

System name	Path
Test Producer	"./SysD Test Consumer.docx"

# 2. Internal structure

Table 4 Program files

Consumer	1. <a href="https://github.com/97gushan/arrowhead-client-example/tree/master/consumer">https://github.com/97gushan/arrowhead-client-example/tree/master/consumer</a>
Client Library	2. <a href="https://github.com/97gushan/arrowhead-client-library">https://github.com/97gushan/arrowhead-client-library</a>
Grapevine	3. <a href="https://github.com/sukona/Grapevine">https://github.com/sukona/Grapevine</a>

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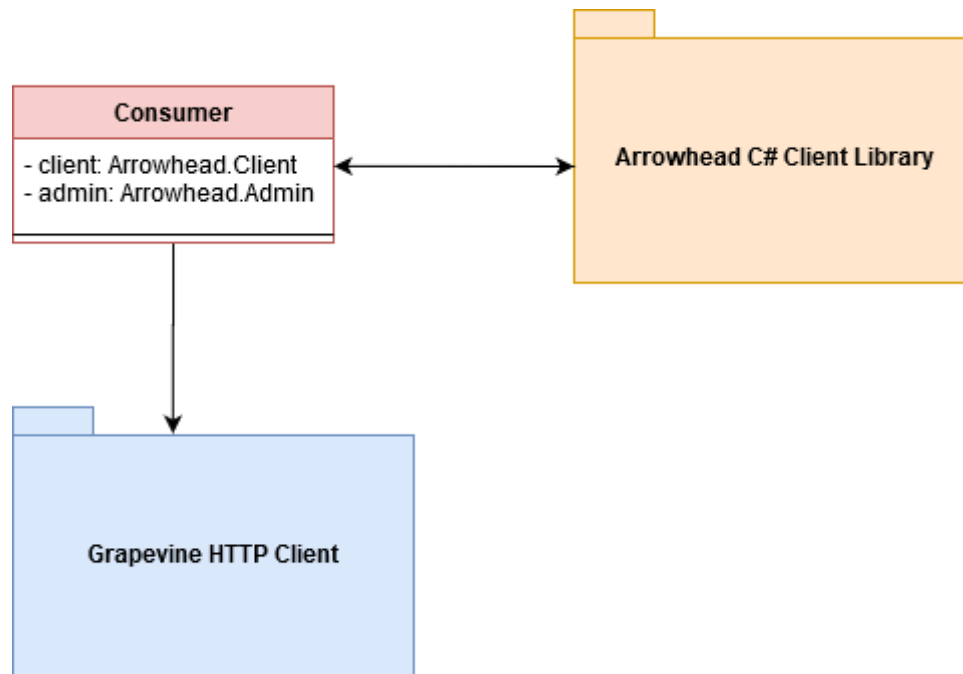
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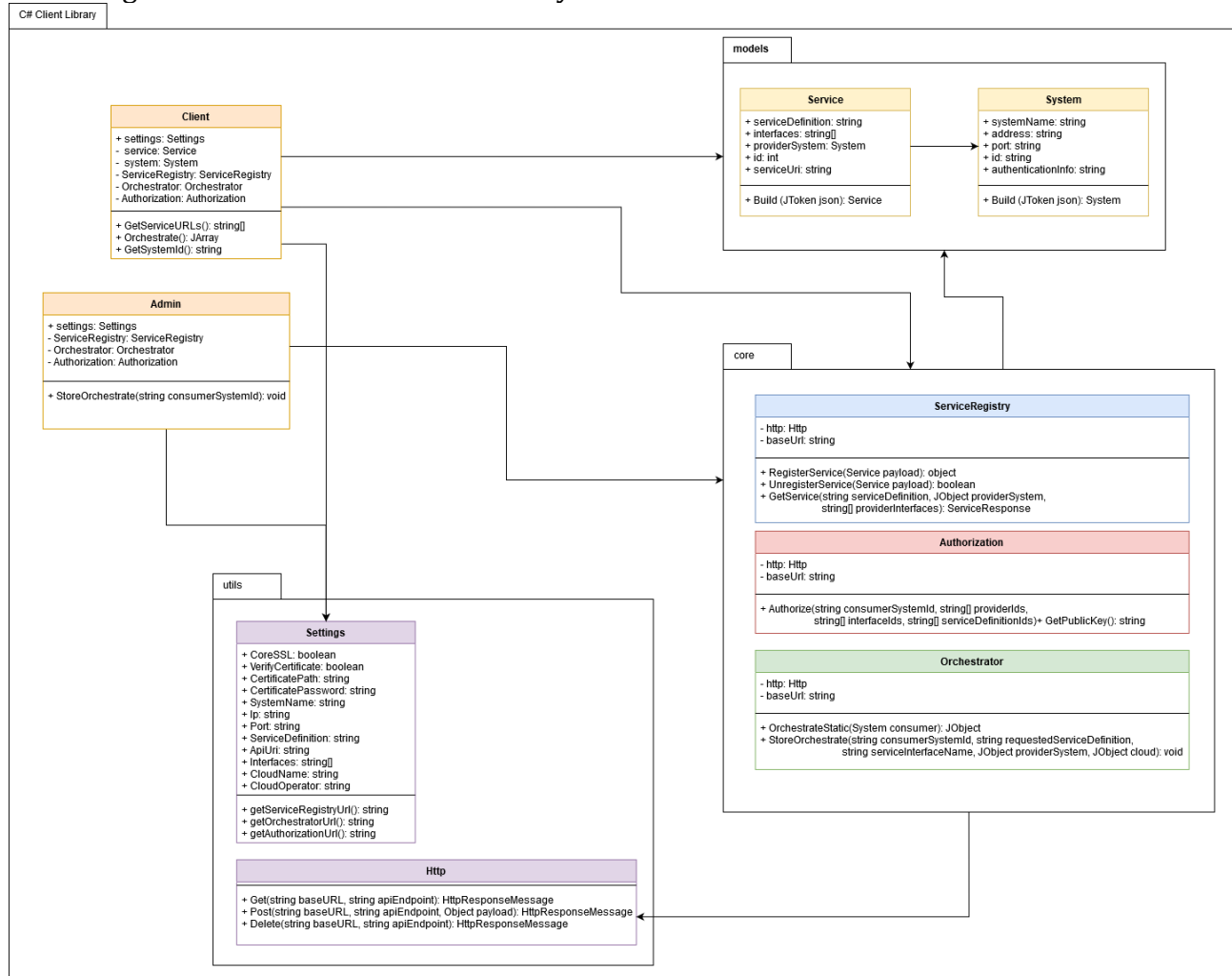
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## 2.1. Decomposition of the System

This system was developed in C# using the Arrowhead C# Client library. To call the Producers REST API the Grapevine HTTP Client is utilized.

Consumer project structure:





## 3. Revision history

### 3.1. Amendments

No.	Date	Version	Subject of Amendments	Author
1	2020-12-10	0.1	First Draft	Gustav Hansson
2				

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## 3.2. Quality Assurance

No.	Date	Version	Approved by
1			
2			