

ALPHAREN Integrator (ARINT) System

(c) 2021 RENware Software Systems. RESTRICTED only for project internal use

# **Development Overview**

#### Table of contents:

- Development Overview
  - Preliminaries
  - CHN channel
  - SRV service
  - File names
  - · Services names

# **Preliminaries**

Development process over ARSRV implies basically the following components:

- SRV service
- · CHN channel

Fundamentally and very high level, a service (SRV) use a channel (CHN) to communicate with external environment.

## CHN - channel

A channel must be defined in ARSRV management interface before use. The channel can be:

- IN channel which establish and endpoint route through an ARINT service can be invoked (called)
- OUT channel which establish a "place whwere ARINT can write (send)" information

The CHN establish:

- · an own name which uniquely identifies it
- · the endpoint address
- · the protocol used
- · data formats in messages exchanged thru the channel
- · auth and other security parameters

### SRV - service

A service must be written in Python then deployed to ARSRV in order to be used.

A service has the following high level flow:

- · defines a handler in order to be accessed by ARSRV
- · obtain any required parameters in order to properly do its job
- · connects to a channel to read required input
- · make the necessary transformation over obtained data
- · connects to a channel to write computed output
- log any process details for future references and errors debugging

#### File names

Development documents (except the current one) will be named as follows:

- 06.DEV as prefix
- optional a code which specify (only if is case) at which subcomponent or pritocol, and so on
- · name of the document

#### Services names

The producer reserve a name space for its services (as built in AR Integrator or as future updates) starting with characters **AR**.

The users are free to name how they wants their own developed services, but not start with AR characters. Respecting this rule will allow producer future updates to overwrite *client own developed services*.

This rule should apply as general validity for any components names, for example channel names.

Anyway the customer must be aware that names starting with AR characters are reserved and are subject of future changes without any notice or change log.

Last update: August 19, 2023