



**ALPHAREN CORE-Integrator (ARINT) System**

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# Development Overview

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## 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 protocol, 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.*

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