

ALPHAREN CORE-Integrator (ARINT) System

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# System Landscape

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# ARCLST the elementary component

The elementary, indivisible element, "heart" of the *ARINT* system is **ARCLST**. This is an *cluster node* which is exactly as the says, a cluster, having independence and ability to solve all problems that ARINT implementation is designed to address.

An ARCLST can be linked with other ARCLST nodes and can work in any mode, ie as active-active or active-passive at the administrator option to configure system.



#### **ARCLST physical locations**

An ARCLST must have all machines (servers) **located in the same LAN**. All machines inside should be able to communicate between them at IP level. Many implementations (and is a practice) isolate the ARCLST from the installation phase in a dedicated operating system container (ie, not application container) - Ubuntu LXC being a very good example of this kind of container.

### ARCLST essential components

- [1 to n] **ARINT Framework** servers (these will work ONLY in active-active mode)
- [0 to 1] ARINT RDatabase relational database server(s)
- [1] ARINT KVDatabase NoSQL database server(s)
- [1] **ARINT CORE** administration and management service and its user interface (once installed and activated becomes physically part of *ARINT Framework*)
- [0 to n] **ARINT products** various other products, applications, etc (once installed and activated becomes physically part of *ARINT Framework*)

### Notes regarding used terms

- notation [n...] specify a quantity range of allowed resources, instances and follow the usual practices in range specifications
- if not otherwise specified by server term is understood a logical server, meaning that can be a physical or any form of virtual one, but a dedicated machine perceived as having its own operating system isolation level (for example its own dedicated root for

Xenix kind of machines, an application container, etc)

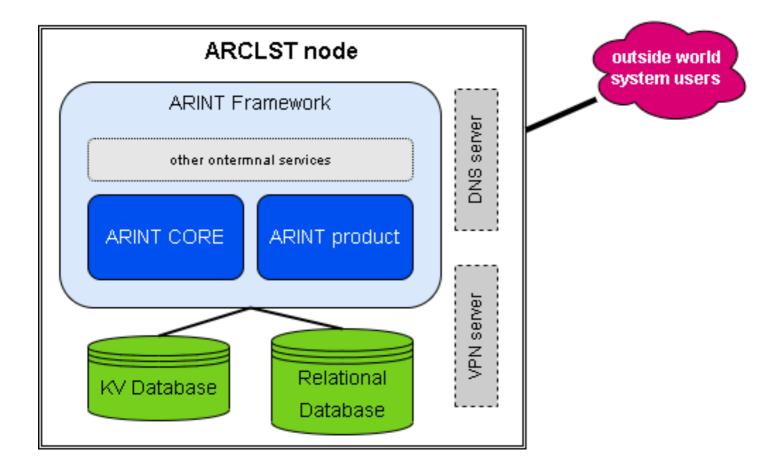
### ARCLST auxiliary components

Auxiliary<sup>2</sup> components can help in various implementation projects depending exclusively of client (customer) options and its infrastructure existing assets.

- [0 to 1] internal DNS (or dynamic DNS) which is a standard DNS inside the ARCLST. No ARINT component will use it but will allow for a "nice" outside LAN addressing of ARCLST components when customer explicitly wants and needs that, otherwise ARINT has a proxy and balancer included which assure its addressing as sysyem and for business purposes
- [0 to 1] internal VPN server that will allow to "enter" in ARCLST LAN space. That's not needed for normal purposes but only if customer need for its own infrastructure operations and easy management

Normally these components are left at router glance as being normal included functionalities in enterprise / business router.

#### ARCLST schematic architecture



# **ARINT Framework**

... IN REVIEW ... PLEASE BE PATIENT - coming soon -(#TODO - continue review ...)

### Notes and remarks

- 1. ARINT Framework machines was in previous versions called ARSRV  $\leftarrow$
- 2. These components are considered "auxiliary" because in most cases they are not needed anymore and in consequence are not part of installation process (to not induce useless overhead at system resources level) ←

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