



# How to Set GSLB Algorithms at Both the GSLB Service and GSLB Pool Levels - Two-Level GSLB Pool Member Service Selection

# How to Set GSLB Algorithms at Both the GSLB Service and GSLB Pool Levels - Two-Level GSLB Pool Member Service Selection [view online](#)

## Background

In Avi GSLB, selection of a GSLB pool member service is a two-level process: First select a pool, then select a service. This is supported by two service-level algorithms and three pool-level algorithms. This article shows how to select the algorithms at both levels.

## Instructions

In the below example, pressing the TAB key prior to completing the first command reveals the two CLI options introduced with 17.2.3: `gslb_service_algorithm_geo` and `gslb_service_algorithm_priority`. Once the GSLB service object named `gs2` is created, definition of its GSLB pools begins with a single pool named `grp1`, whose first member is located at IP address `1.2.3.4`. After the last `save` command, we see the fields that have been set for this bare-bones global service. Notice how the `grp1` GSLB pool group has been assigned the `GSLB_ALGORITHM_ROUND_ROBIN` algorithm and `priority = 10` by default.

## Avi CLI

```
[admin:john-ctrl-1]: > configure gslbservice gs2 algorithm gslb_service_algorithm_
gslb_service_algorithm_geo      Use the client (LDNS) source IP to choose the GSLB Pool closest by geographical locat
gslb_service_algorithm_priority  Pick the GSLB pool with the highest priority.
[admin:john-ctrl-1]: > configure gslbservice gs1 algorithm gslb_service_algorithm_geo domain_names 1.abc.com
New object being created
[admin:john-ctrl-1]: gslbservice> groups name grp1
New object being created
[admin:john-ctrl-1]: gslbservice:groups> members ip 1.2.3.4
New object being created
[admin:john-ctrl-1]: gslbservice:groups:members> save
[admin:john-ctrl-1]: gslbservice:groups> save
[admin:john-ctrl-1]: gslbservice> save
```

Field	Value
uuid	gslbservice-5030d012-c291-4717-8796-40d9cfc3ad1e
name	gs1
domain_names[1]	1.abc.com
groups[1]	
name	grp1
priority	10
algorithm	GSLB_ALGORITHM_ROUND_ROBIN
members[1]	
ip	1.2.3.4
ratio	1
enabled	True

```
| controller_health_status_enabled | True |
| health_monitor_scope            | GSLB_SERVICE_HEALTH_MONITOR_ALL_MEMBERS |
| enabled                         | True |
| use_edns_client_subnet          | True |
| wildcard_match                  | False |
| site_persistence_enabled        | False |
| algorithm                       | GSLB_SERVICE_ALGORITHM_GEO |
| is_federated                    | True |
| tenant_ref                      | admin |
+-----+
[admin:john-ctrl-1]: >
```

## Avi UI

In the GSLB service editor there are two fields via which to choose the algorithms that apply at the first (service) and second (pool) levels.

At the first (service) level one has two choices:

**New GSLB Service**

Name\*

Application Name\*  Subdomain\*

+ Add Domain Name

Health Monitor\*

Health Monitor Scope\*  Only Non Avi Members  All Members  Controller Health Status\*

Load balancing algorithm\*   Site Persistence\*

Geo location-based  
Priority-based  
Active Active Active Standby

LB Algorithm\*

**Pool Member**

IP Address  Virtual Service

Site Cluster Controller\*

Public IP Address\*

Description

+ Add GSLB Pool Member

Save

At the second (pool) level one has three choices:

### New GSLB Service

Name <sup>\*</sup> ⓘ  
gs-with-two-level-algorithm

Application Name <sup>\*</sup> ⓘ  
alpha.com

Subdomain <sup>\*</sup> ⓘ  
.com

+ Add Domain Name

Health Monitor ⓘ  
[Empty]

Health Monitor Scope ⓘ  
 Only Non Avi Members  All Members  Controller Health Status ⓘ

Load balancing algorithm ⓘ  
Geo location-based

Site Persistence ⓘ

Select Group Type  
**Active Active** Active Standby

LB Algorithm <sup>\*</sup> ⓘ  
Round Robin  
Consistent Hash  
**Round Robin**  
Geo

### Pool Member

IP Address  Virtual Service

Site Cluster Controller <sup>\*</sup> ⓘ  
Select Site

Public IP Address ⓘ  
[Empty]

Description  
[Empty]

Add GSLB Pool Member

Save

## Additional Information

- [Avi GSLB Architecture, Terminology, and Object Model](#)