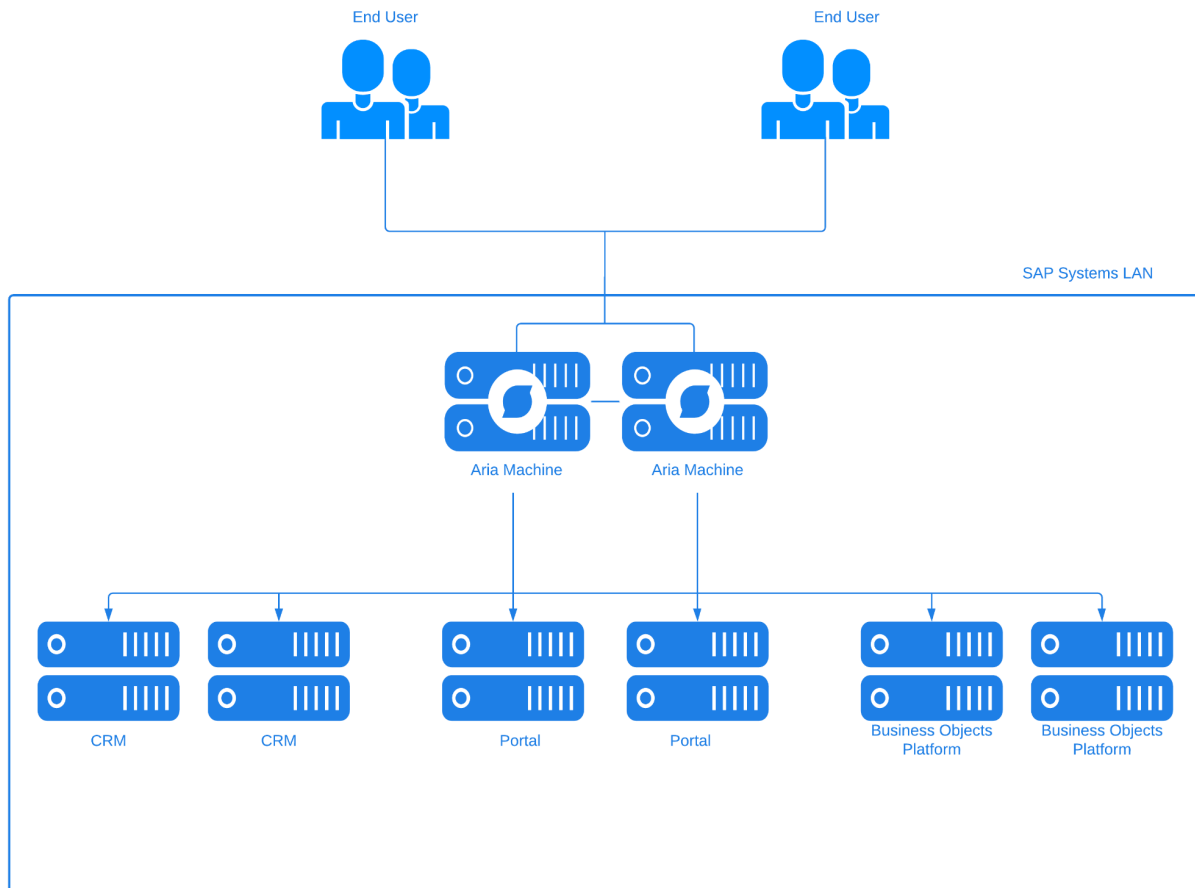


SNAPT ARIA - SAP Solution

A Quickstart guide to assist with the deployment of Snapt Aria with SAP Backends

Introduction

As a full ADC(Application Delivery Controller) solution Snapt can provide load balancing, SSL offloading, Acceleration and optimization of your SAP applications.



With Aria, all the required configuration for load balancing, acceleration, optimization or security with the WAF can be done directly on the Aria GUI.

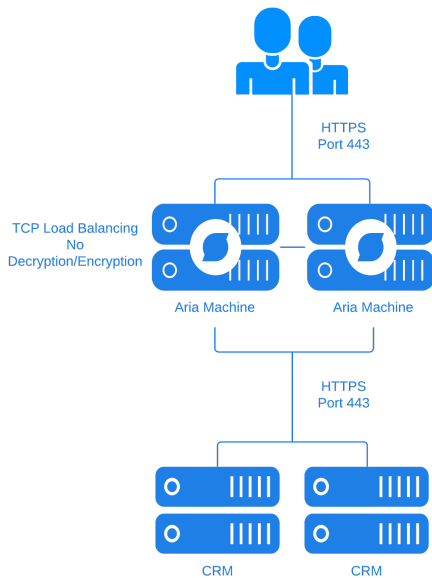
Aria also has an agnostic deployment approach and can be positioned in practically any network, on-premise or cloud.

The 2 deployment types that we will be discussing are **HTTPS Passthrough** and **SSL Offloading**.

Please be sure to consult <https://docs.snapt.net/> for additional information about the topics discussed from here onwards.

HTTPS Passthrough

Create an HTTPS load balancer which passes HTTPS traffic through to your servers without terminating it. This is ideal for anyone with HTTPS web servers that wishes to simply load balance them. It uses source hashing to support server sessions.



If non standard ports are used by the SAP application for better security, they can just be configured as such on the Aria Machine.

The load balancer will run on layer 4(TCP Mode) as the traffic will be encrypted between the backend servers and the end user.

Additional plugins such as the Accelerator and WAF (Web Application Firewall) cannot be used as they work exclusively on Layer 7 (HTTP).

An example of the configuration is as follows -

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Dashboard Setup SSLB Balancer Accelerator WAF Cache Utilities Reports Help

ADDING A HTTPS GROUP

ADD GROUP

Please enter the required details for creating your HTTPS load balancing group below. Defaults have been provided wherever possible.

Group Information

Group Name: Web-HTTPS

IP Address: 192.168.0.10

SSL Port: 443

SSL Servers

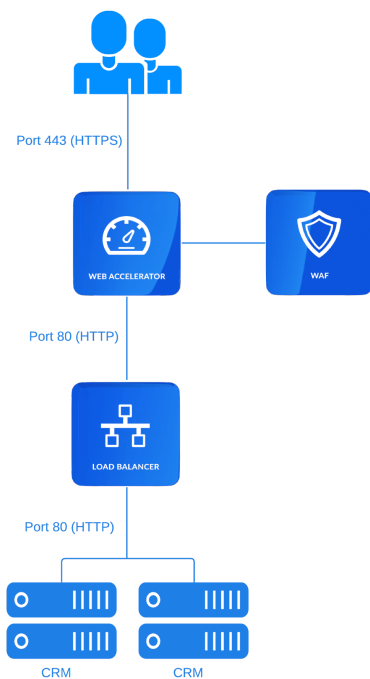
You must have at least one, but typically two or more web servers in this group. You can add more servers afterwards if needed. Only fill as many as you require.

SSL Server 1	192.168.101	443
SSL Server 2	192.168.102	443
SSL Server 3	192.168.103	443
SSL Server 4	192.168.104	443
SSL Server 5	X.X.X.X	443

SSL Offloading

Create an Accelerator with SSL termination enabled, this would then include optimization with Pagespeed and caching. WAF would be enabled for OWASP top 10 protection and security. Traffic would then be passed to the Balancer internally to load balance traffic to SAP backend servers.

This configuration can only be implemented with layer 7 (HTTP) traffic.



Non standard ports can be used, just need to ensure that it is set to run in Layer 7 (HTTP) mode.

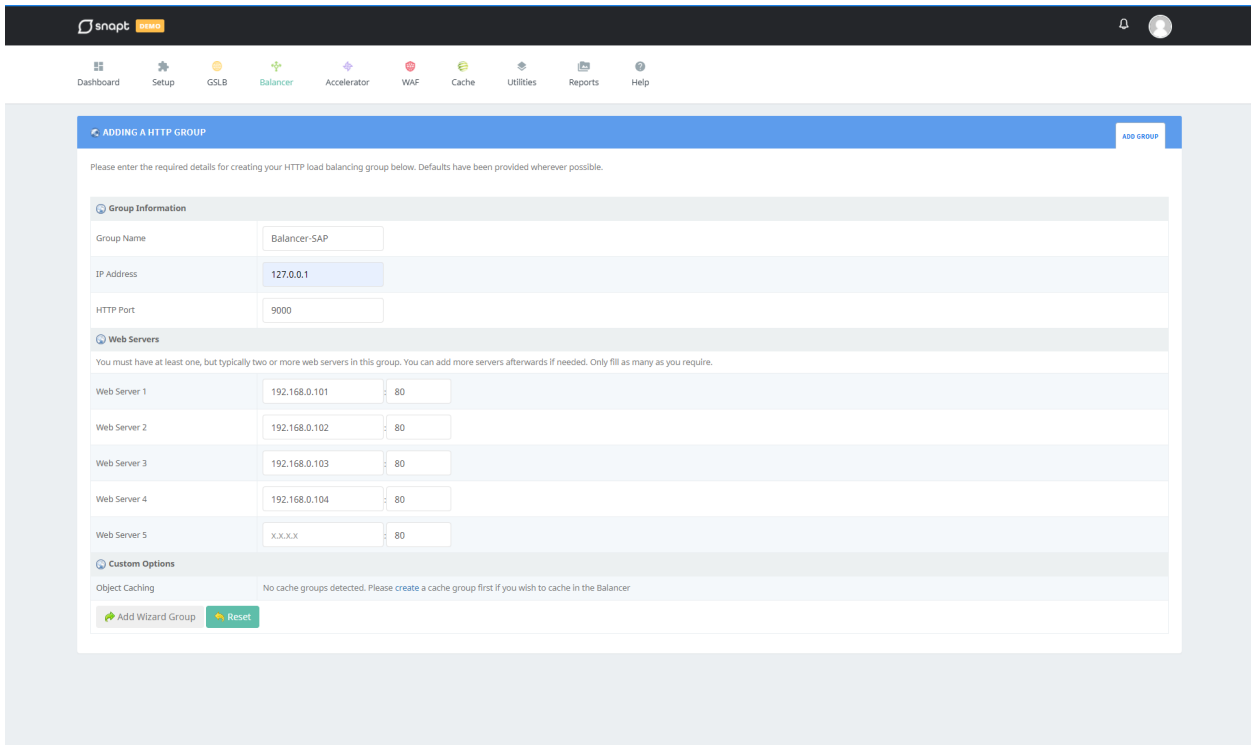
The configuration would be as follows:

The end user would connect to the Accelerator via HTTPS, the Accelerator would then decrypt the requests with [certificates provided](#). The WAF will then examine all decrypted requests to ensure no malicious intent. If the request is valid it would then be sent to the Balancer on the same machine via HTTP, it can be set up so that the Accelerator passes the traffic over localhost (127.0.0.x), for increased network security.

Once the Balancer receives the request it would then direct the traffic to the intended backend depending on the balance method set.

A HTTP Balancer needs to firstly be set up and can be done via the wizard. The reason why it is created first is so that it can be selected as a backend for the Accelerator Configuration.

The bind address for the balancer is set to localhost as the Accelerator will push traffic to it.



Accelerator is setup next using the HTTPS setup wizard. Ensure the WAF plugin is installed to enable it in the configuration. For SSL offloading using the Accelerator the correct certificate and key needs to be uploaded. More information can be found [here](#).

Under the group name the Balancer can be selected that was created in the previous step.

It is possible as well to re-encrypt data to the backend servers if the security policy requires all data to be encrypted in flight.

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Dashboard Setup GSLB Balancer Accelerator WAF Cache Utilities Reports Help

← ADDING A HTTPS FRONTEND ADD FRONTEND

Please enter the required details for creating your HTTP Frontend below. Defaults have been provided wherever possible.

Frontend Information

Frontend Name:

IP Address: Manual Input

HTTP Port:

SSL Certificate:

SSL Certificate Key:

Enable WAF:

Enable PageSpeed:

Enable Cache:

Upstream: Balancer Specify

Add an Balancer Group/Frontend

Because you have Snapt Balancer installed you can select a frontend or group from Balancer to send Accelerator traffic to. This is optional, and if you do not wish to do so you can change Upstream to specify above.

Group Name:

[Add Wizard Frontend](#) [Reset](#)

Once the Accelerator has been set up and ensures WAF blocks have been enabled, statistics and logs can be viewed under the WAF Dashboard.

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Dashboard Setup GSLB Balancer Accelerator WAF Cache Utilities Reports Help

SNAPT WAF OVERVIEW THROUGHPUT LOG MONITOR MODULES REFERENCE LOOKUP

Packets Rate

Data Rate

Servers

Accel-SAP-Frontend: N/A socket connections. [Top IPs](#)

Metrics	60 minutes	24 hours	7 days
Average Connections	4	3	3
WAF Blocks	2	2	2

WAF Recent Blocks

Time	IP	Request	Action
2021-07-30 09:11:38	10.10.10.6	\$SQL4	Details
2021-07-30 09:11:07	10.10.10.6	\$TRAVERSAL4	Details
2021-07-06 16:26:09	192.168.0.233	\$SQL4, \$SQL4	Details
2021-06-25 08:15:31	192.168.0.233	\$SQL4, \$SQL4	Details
2021-06-25 08:14:48	192.168.0.233	\$SQL4, \$SQL4, \$XSS:8	Details
2021-06-23 09:34:59	192.168.0.24	\$XSS:4, \$XSS:4	Details
2021-06-07 09:49:15	192.168.0.233	\$SQL4, \$XSS:8	Details
2021-06-07 09:48:51	192.168.0.233	\$SQL4, \$SQL4, \$XSS:8	Details
2021-06-04 15:42:31	192.168.0.233	\$SQL4, \$SQL4	Details
2021-06-04 15:36:49	192.168.0.233	\$SQL4, \$SQL4	Details