How to synchronize a GSLB configuration across sites on a NetScaler ADC?

Use Case
Easily synchronize a NetScaler global server load balancing (GSLB) configuration across all sites.

Introduction
NetScaler GSLB provides load balancing among geographically dispersed datacenters, so that each end user always gets the best possible experience. For GSLB to work perfectly, the configurations should be exactly the same on all the sites. Synchronizing them manually could be a tiresome job, because GSLB configurations can be huge and manual configuration across all sites is error prone.

NetScaler ADCs provide a tool that synchronizes the running GSLB configuration across all the sites, with the click of a button. The site from which GSLB synchronization command is initiated is called the master node, and the receiving sites are called slave nodes. The master node finds the differential (or delta) between its configuration and that of a slave node, and pushes the differential configuration to the slave node. It does the same on all the other slave nodes in the setup.

Prerequisites to run GSLB synchronization –

- Local GLSB Sites are configured on all the appliance in the GSLB configuration.
- At least one ADNS service or a DNS server is configured on each site, so that the site can process DNS requests.
- Management access is enabled on all the GSLB-site IP addresses.
- The master and slave NetScaler appliances are running the same NetScaler software version.
- The RPC node password for each GSLB site IP address is same across all the GSLB sites in the GSLB configuration.
- The firewall at each site is configured to accept the synchronization and MEP connections.

NetScaler GSLB supports following extended options –

- Debug – GSLB sync with this option provides more details (such as success or failure) about each command used in the synchronization process.
- Preview – Finds the differential for each slave node but does not push the configuration from the master node. Use this command to get a preview of the commands synchronization would push onto each slave node.
- Force Synchronization – Clears the existing GSLB configuration on a slave node and pushes the master node’s running configuration onto it. This helps in situations where some commands are failing in the process of synchronization. Because this command can result in traffic disruption, it is allowed on only one site at a time.
- No Warning – Executes the GSLB synchronization without prompting for any confirmation message or issuing any warning. This helps in automated setups.
- Save Configuration – Saves the master node’s running configuration before connecting to slave node, pushes the configuration on the slave node and saves the running configuration on slave node.
For more information about GSLB synchronization, including limitations and technical details, see:

Configuration Steps in NetScaler ADC

Step 1: Synchronize

**CLI:**

At the command prompt, type:

```bash
sync gslb config [-nowarn | -debug | -preview | -forceSync <slaveSiteName> | -saveconfig]
```

**GUI:**

In the NetScaler GUI, go to Configuration > Traffic Management > GSLB and, on landing page, click **Synchronize configuration on remote sites.**