GoGo Server Network Environment Configuration Guide

Introduction to GoGo Server Network Environment

A GoGo server is a specialized configuration used in network environments for managing communication between a server and a group of clients. It is specifically designed to implement the so called GoGo protocol, facilitating interactions between the server and connected clients.

The key elements of a GoGo Server Network Environment are:

- The GoGo Server
- The maximum number of clients that can be connected to the GoGo Server
- The GoGo Server Pool name

Additionally it is possible to define a "mirror" GoGo Server that can operate together with the main GoGo server.

Configuring Network Settings

For setting up network parameters like IP addresses, subnet masks, and default gateways, standard CISCO commands are utilized.

Key Component: GoGo Server Pool

The essential element of a GoGo server is its GoGo Server Pool, which acts as a central hub containing the server, its properties, and the managed clients.

Managing the GoGo Server Pool

- **Creation**: To create a new GoGo server pool, use the command:
  ```
  create GoGo_server_pool <GoGo_SERVER_POOL_NAME>
  ```
- **Deletion**: To delete an existing GoGo server pool, use:
  ```
  delete GoGo_server_pool <GoGo_SERVER_POOL_NAME>
  ```
- **Access**: To access a specific GoGo server pool, use:
  ```
  access GoGo_server_pool <GoGo_SERVER_POOL_NAME>
  ```

Note: Attempting to access a non-existent pool will result in an exception. The 'create' command also grants access if the pool already exists.

Adding the GoGo Server to the Pool

After defining or accessing the GoGo server pool, add the server's IP address using:

```
add GoGo_server <SERVER_IP_ADDRESS>
```

This command initiates a network search (FK_SEND) for the server; if found, an acknowledgement (FK_ACK) is received, allowing further configuration.

Configuring GoGo Server Pool Settings

- Set the maximum number of connectable GoGo clients using:
  ```
  num_GoGos <DEFINE_NUM_OF_GoGoS>
  ```
- Include a GoGo mirror in the server for replicating behavior, configurable with:

```
      mirror <IP_ADDRESS_MIRROR>
-   Introduce GoGo clients to the server's pool with:
      add GoGo_client <CLIENT_IP_ADDRESS>
```

Protocol

The server oversees the configuration of clients within the pool. When the server intends to include a particular client in its pool, it dispatches a GG_SEND message to the designated client IP address. Upon receiving this message, the client responds with a GG_ACK, granting permission for the server to include it in the pool. Conversely, if the client is ineligible for inclusion in the server pool due to various reasons, it responds with a GG_NACK.

Example Configuration

For a GoGo server pool named <GoGo_SERVER_POOL_NAME> with a maximum of <DEFINE_NUM_OF_GoGoS> clients, a GoGo server IP address <SERVER_IP_ADDRESS> and a mirror IP address <IP_ADDRESS_MIRROR>, it is necessary to generate a set of <DEFINE_NUM_OF_GoGoS> clients in the network where the server operates.

The final configuration script will be:

```
create GoGo_server_pool <GoGo_SERVER_POOL_NAME>
add GoGo_server <SERVER_IP_ADDRESS>
mirror <IP_ADDRESS_MIRROR>
num_GoGos <DEFINE_NUM_OF_GoGoS>
add GoGo_client <FIRST_IP_ADDRESS_IN_THE_NETWORK>
add GoGo_client <SECOND_IP_ADDRESS_IN_THE_NETWORK>
…
add GoGo_client <LAST_CLIENT_IP_ADDRESS_IN_THE_NETWORK>
```