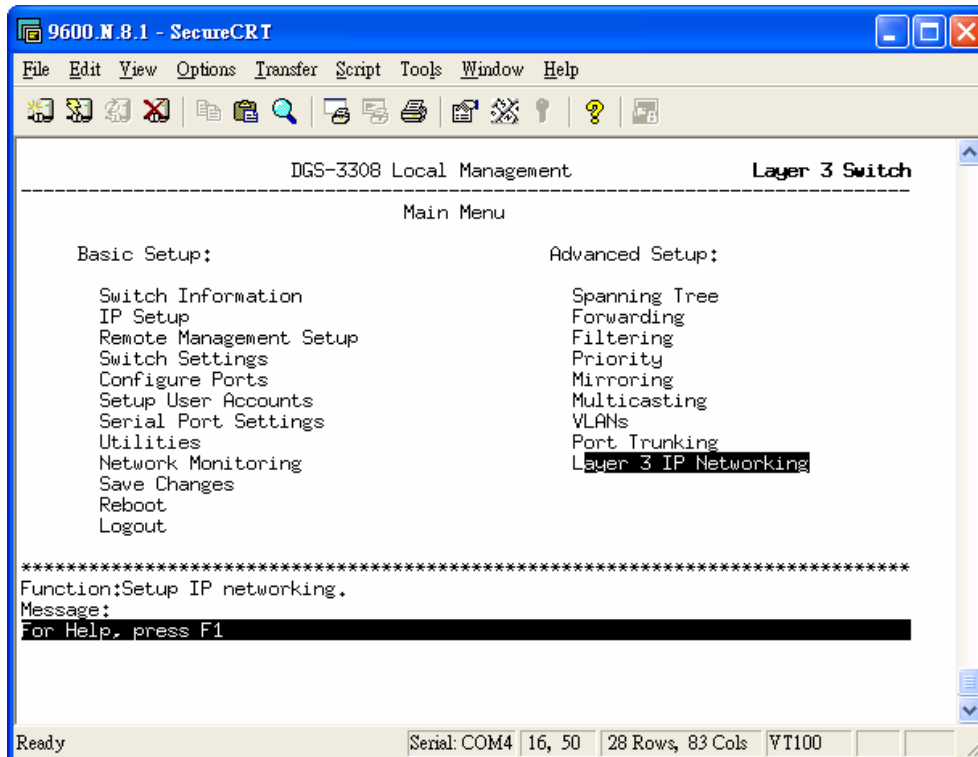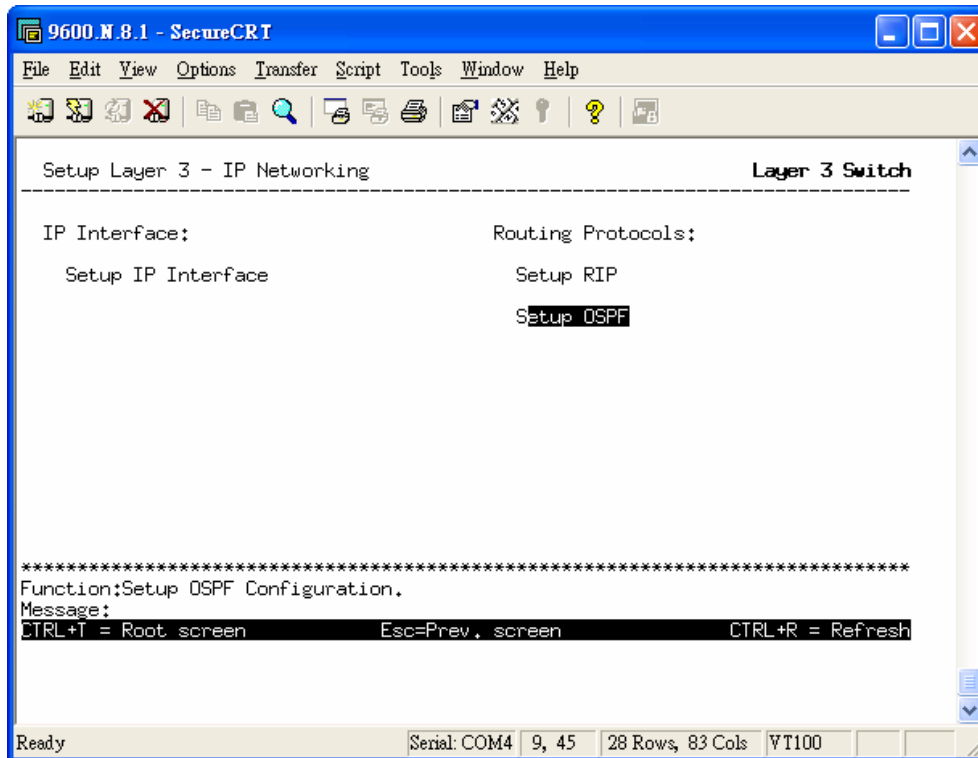# How to setup OSPF on DGS-3308

First select "Layer 3 IP Networking"
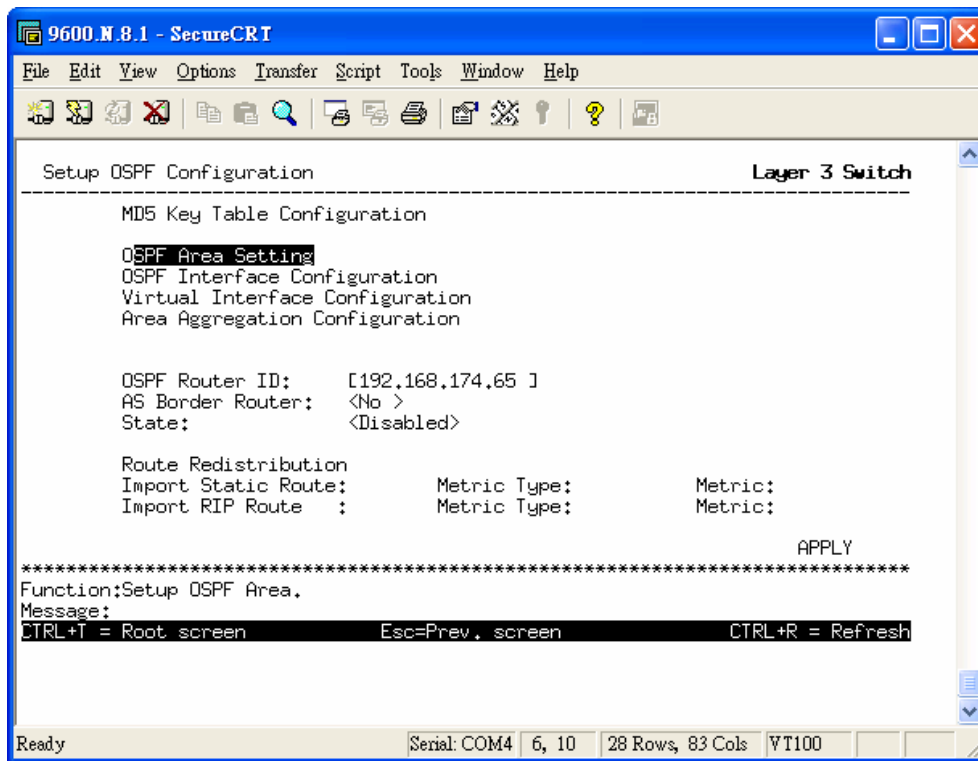

Then choose "Setup OSPF"

OSPF Area Setting

This menu allows the configuration of OSPF Area IDs and to designate these areas as either **Normal** or **Stub**. Normal OSPF areas allow Link-State Database (LSDB) advertisements of routes to networks that are external to the area. Stub areas do not allow the LSDB advertisement of external routes. Stub areas use a default summary external route (0.0.0.0 or Area 0) to reach external destinations.
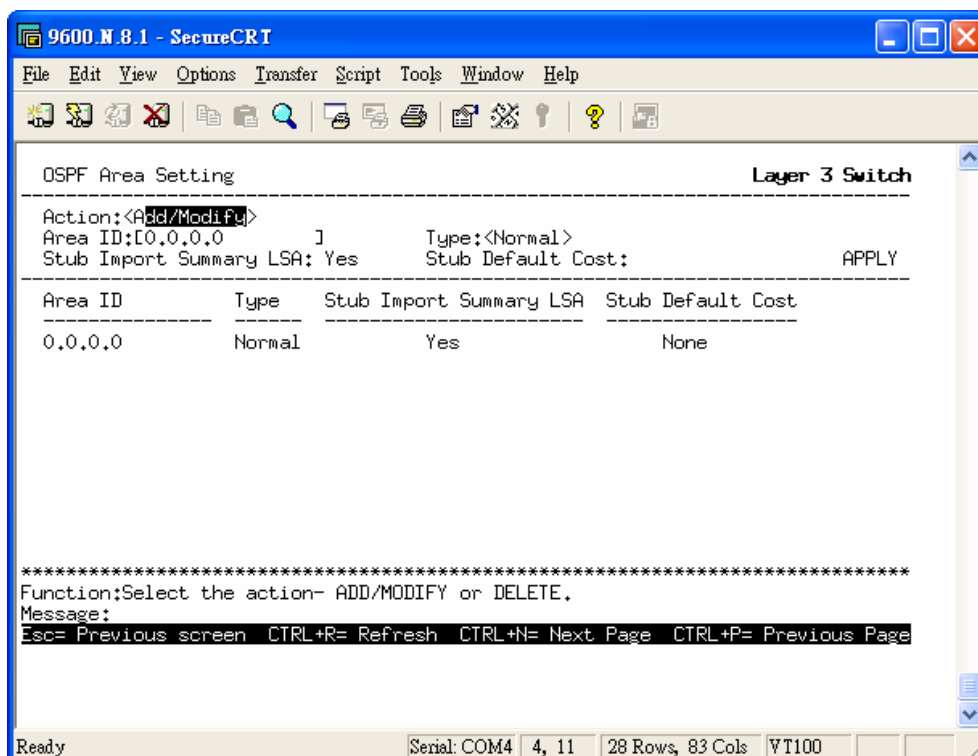

In OSPF Area Setting you can define OSPF Area and Type.

There are two types you can choose "Normal" or "Stub".
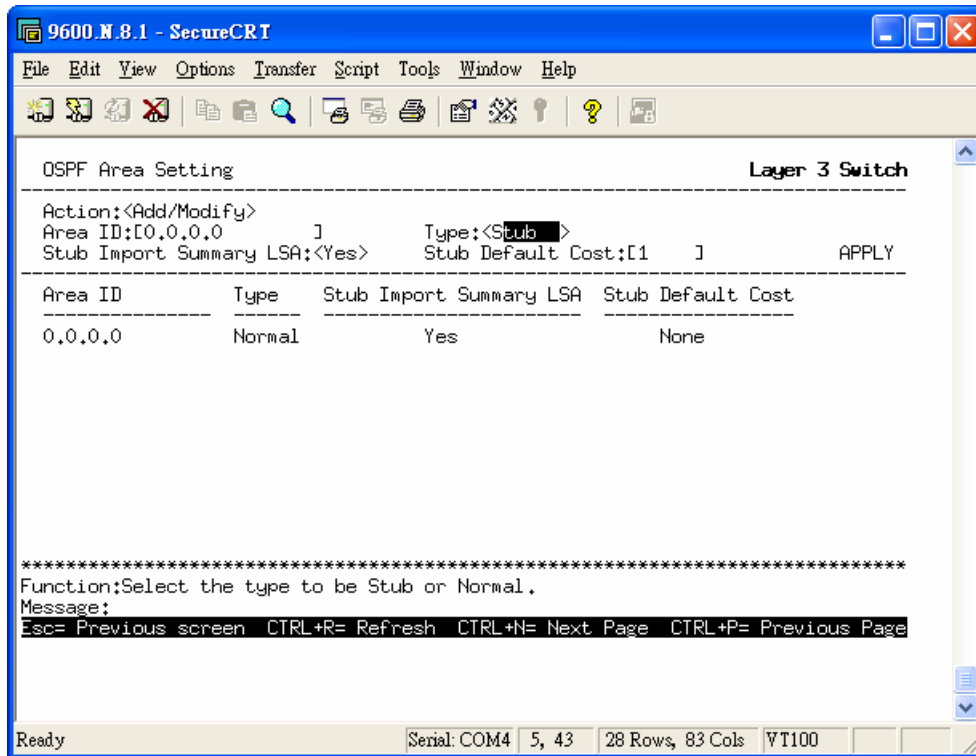
To change an existing set in the list, type the **Area ID** of the set you want to change, make the changes and click the **Apply** button. The modified OSPF area ID will appear in the table.

See the parameter descriptions below for information on the **OSPF Area ID Settings**.

OSPF Interface Configuration

Here you can define OSPF "Interface Name", "Area ID" and other variables.

Virtual Interface Configuration

Click the **Virtual Interface Configuration** link to view the current **OSPF Virtual Interface Configuration**. There are not virtual interface settings configured by default, so the first time this table is viewed there will be not interfaces listed. To add a new OSPF virtual interface configuration set to the table, select the **Add**. To change an existing configuration, click on the **Transit Area ID** for the set you want to change. The menu to modify an existing set is the same as the menu used to add a new one.
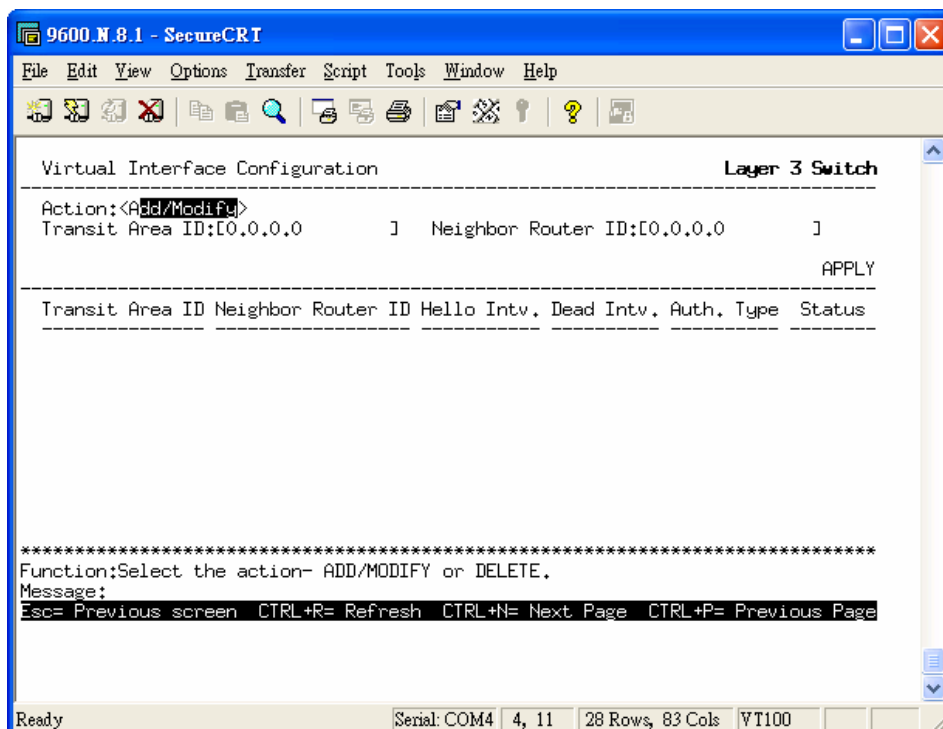
Area Aggregation Configuration

Area Aggregation allows all of the routing information that may be contained within an area to be aggregated into a summary LSDB advertisement of just the network address and subnet mask. This allows for a reduction in the volume of LSDB advertisement traffic as well as a reduction in the memory overhead in the Switch used to maintain routing tables.

There are no aggregation settings configured by default, so there will not be any listed the first accessing the menu. To add a new **Area Aggregation** setting, select the **Add/Modify** button. To change an existing configuration, click on the hyperlinked Area ID for the set you want to change. The menu to modify an existing configuration is the same as the menu used to add a new one.
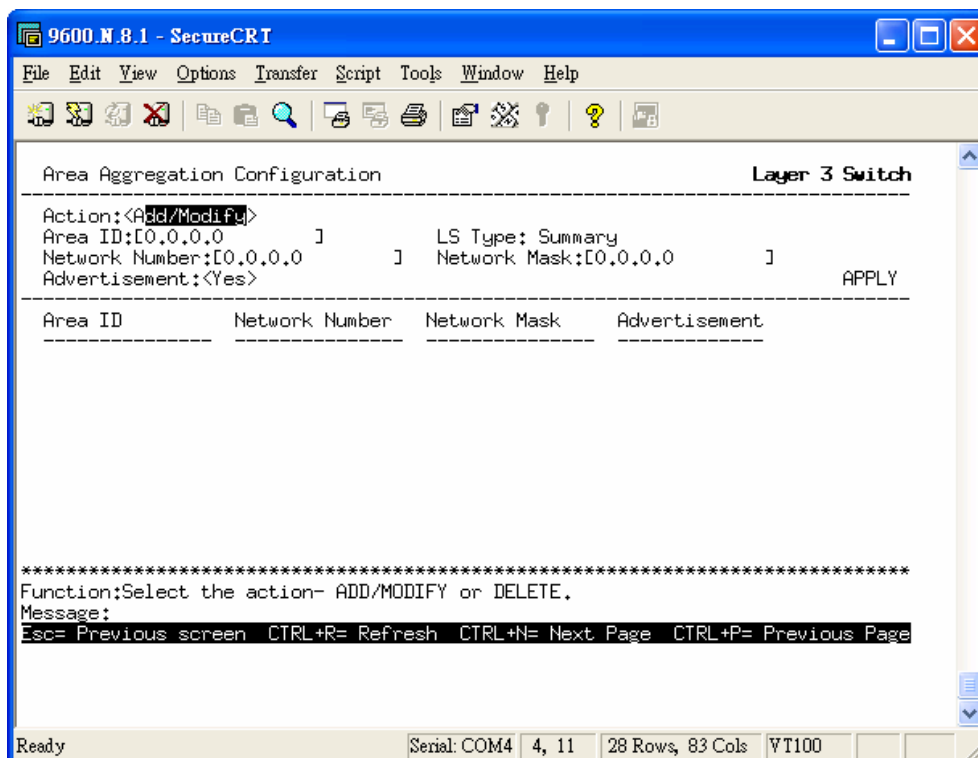
Message Digest Authentication (MD-5)

MD-5 authentication is a cryptographic method. A key and a key-ID are configured on each router. The router then uses an algorithm to generate a mathematical "message digest" that is derived from the OSPF packet, the key and the key-ID. This message digest (a number) is then appended to the packet. The key is not exchanged over the wire and a non-decreasing sequence number is included to prevent replay attacks.