

Configure the Local Database Size on the Wireless LAN Controller

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Introduction

This document explains how to configure and view the local database size on the Wireless LAN Controller (WLC).

Prerequisites

Requirements

Cisco recommends that you have knowledge of these topics:

- Knowledge of how to configure the WLC and Lightweight Access Point (LAP) for basic operation
- Basic knowledge of Lightweight Access Point Protocol (LWAPP)

Components Used

The information in this document is based on these software and hardware versions:

- Cisco 4400 Series WLC that runs firmware 5.1
- LWAPP-based access point (AP) Series 1230

The information in this document was created from the devices in a specific lab environment. All of the devices used in this document started with a cleared (default) configuration. If your network is live, make sure that you understand the potential impact of any command.

Conventions

Refer to Cisco Technical Tips Conventions for more information on document conventions.

Database Size on the WLC

The local user database is limited to a maximum of 2048 entries and is set to a default value of 512 entries. The local database stores entries for these items:

- MAC filters (clients)
- AP MIC/SSC (AP authorization list)
- Dynamic Interfaces
- Management users
- Local net users
- Excluded Clients

The database size can be configured using the WLC CLI or the GUI.

In order to configure the local database using the CLI, enter this command:

```
config database size
```

The database size value can be between 512 and 2040. By default the size is 512.

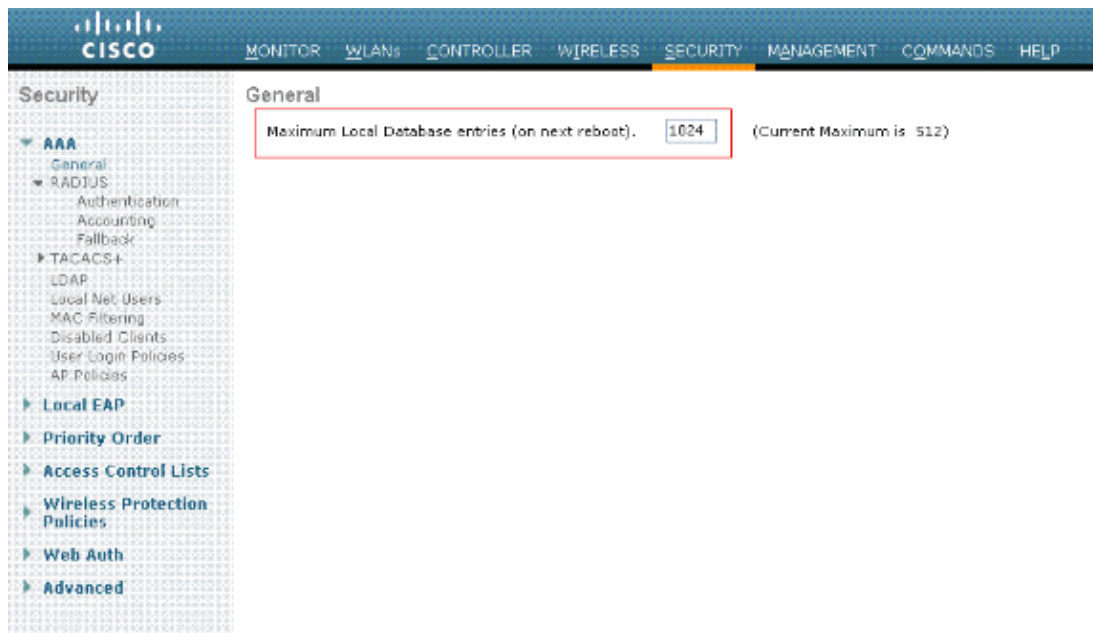
Examples:

```
(Cisco Controller) >config database size ?
```

```
<count>          Enter the maximum number of entries (512-2048).
```

```
Please save the configuration and reset the system ("reset system") for the change to take
```

In order to configure the database using the GUI, navigate to the **Security > General** page on the WLC. You can configure the database size as shown here:



Once you configure the database size using the controller CLI or GUI, you need to reboot the controller for the configuration to take effect. The **show data summary** command lists the number of current database entries and the number of database entries after reboot.

```
(Cisco Controller) >show database summary
```

```
Current Max database entries..... 512
Max database entries on next reboot..... 1024
Current number of entries used..... 3
```

Verify

You can use this command to verify the configuration:

- **show database summary** In order to display the maximum number of entries in the database, use the **show database summary** command.

This command has no arguments or keywords. This command has no defaults. This command was introduced in version 4.1.

Examples:

```
(Cisco Controller) >show database summary

Current Max database entries..... 512
Max database entries on next reboot..... 1024
Current number of entries used..... 3
```

At this point of time, you can only view the total number of local database entries configured and used. You will not be able to view the item wise split up (No of MAC entries, No of Management users, No of local net users etc). You will have to view the specific **show** commands in order to view this information.

For example, to view the number of MAC filters configured, use the **show macfilter summary** command.

```
(Cisco Controller) >show macfilter summary

MAC Filter RADIUS Compatibility mode..... Cisco ACS
MAC Filter Delimiter..... None

Local Mac Filter Table

MAC Address          WLAN Id      IP Addr      Description
-----
00:0b:85:71:1b:00    Any          unknown
00:0b:85:7f:47:00    Any          unknown
```

In order to view the number of local netusers configured, use the **show netuser summary** command.

```
(Cisco Controller) >show netuser summary

Maximum logins allowed for a given user name..... Unlimited

User Name          Permissions  Description
-----
admin              read-write
```

Troubleshoot

When the default WLC setting of "config database size 512" is used, you might receive any one of these errors when trying to add users to the local database:

- When attempting to add a MAC address to a long MAC filter list, the error message `Error in creating MAC filter` might be seen.
- When adding a large number of users to the local database, a point can be reached where some user entries are silently ignored.
- Similarly, a point can be reached while adding SSCs for APs, where no more entries can be added,

and the "Authorization entry does not exist in Controller's AP Authorization List." messages are seen.

These error messages are seen when the number of entries in the local database has reached the maximum configured value. If the database is not increased from the default, this value will be 512.

In order to resolve these issues, increase the size of the database using the **config database size** command.

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Wireless – Mobility: General

Related Information

- [Cisco Wireless LAN Controller Configuration Guide, Release 5.2](#)
- [Technical Support & Documentation – Cisco Systems](#)

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