
Managing Active Directory Caching and Statistics

Manual AD Cache Refresh

In addition to scheduled periodic AD Cache updates, the SBC Edge allows you to refresh (update) the AD Cache manually. Subsequent updates are automatically performed at the interval specified in the **Update Frequency** field or the time specified in the **First Update Time** field, whichever occurs first.

Typically this feature is used to make user information available immediately after they are added to Active Directory, rather than wait for the automatic update, which might take as long as 30 days.

To Refresh the AD Cache:

- Click the Refresh Cache text at the top of the Active Directory Configuration page.

Active Directory Caching

The SBC Edge uses a Local AD Cache in an effort to enhance system performance and survivability.

Performance

Performance is enhanced by eliminating the need to communicate with and query the Active Directory server for each and every call. This improves the performance of the AD server, and has the added benefit of increasing call speeds and relieving load on the network.

Survivability

In the event of a loss of communication with the Active Directory, whether through a loss of network connectivity or an AD server error, the SBC Edge is still able to perform call routing tasks based on the Local AD Cache.



Sonus SBC 1000/2000 Model Differences

If the SBC Edge is [rebooted](#) during an Active Directory Server outage, it will use its local AD cache for call routing purposes (post power up) if:

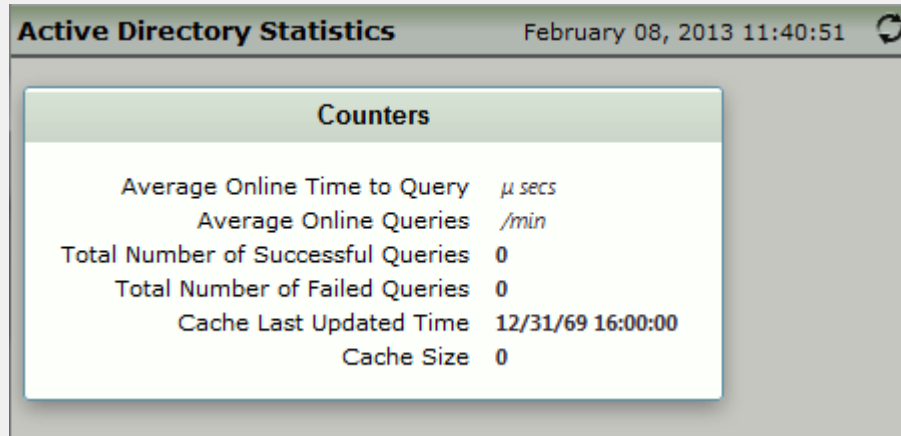
- **Sonus SBC 1000:** an external USB storage drive is [attached to the Sonus SBC 1000 main board](#). Without it, the local AD cache is purged between system reboots (and upgrades). In order to achieve a high level of resiliency, **we recommend attaching an external USB drive to your Sonus SBC 1000 unit.**
- **Sonus SBC 2000:** Unlike the Sonus SBC 1000, the Sonus SBC 2000 model has built-in storage with reserved space for the Local AD cache to overcome this situation. No external storage is necessary.

Viewing Active Directory Statistics

To view Active Directory Query Statistics:

Click the Display Statistics text at the top of the Active Directory Configuration page.

Figure 1: View Active Directory Statistics



Tips on Active Directory Cache Size

The total size for the Active Directory cache is 20 MiB. Here's a quick calculation showing how the cache memory is utilized:

Number of Records to cache	100,000
Number of Attributes per record	4
Number of bytes per attribute	50
Total cache size	$100,000 * 4 * 50 = 20 \text{ MiB (approx)}$

Note: The maximum cache size is 25 MiB. The database pointer information consumes a small portion of the memory, thus the cache capacity will be slightly less than calculation above.