

## Creating and using 'Snapshots'

Occasionally, you may want to take a 'snapshot' of all of the current values of all the units in your system.

The most common use of a database snapshot is for synchronizing two or more copies of XTension on multiple Macs, each running the same copy of the database, but one has been 'off-line' for some time.

By requesting that the Host 'save snapshot file', the Monitor can load the file and thereby update the 'stale' values on the Monitor.

The snapshot file is composed only of the current values and processing status flags of each of the elements of the XTension database.

This includes the active processing flags such as 'blocked'. No scripts or scheduled events are included in the snapshot.

After loading a 'snapshot', the database values shown on the Monitor will be identical to those on the Host.

Note that the sending and receiving databases are normally identical, however any unit names in the snapshot which are not also in the receiving database, will be ignored upon 'loading', and will not cause error or warning !

This is a feature, which allows you to have two databases on two different machines which are similar but NOT identical ! ie: Some units may be present in both databases, some may be unique to the 'Host' and 'Monitor' databases.

This is useful when you have two Macs and two X-10 interfaces, and the 'Monitor' can detect a failure of the Host, and then take over the control of the system just by 'set monitor mode false'.

It is also useful where you have a very large system, and you need multiple redundant physical controllers and Macs. Each Mac is in control of an area, and yet needs to be coordinated with the behavior and status of the other Macs and their areas.

Multiple buildings: greenhouses, warehouses, apartment buildings  
Multiple areas of concern: fire/smoke , movement and access

You might also want to create a 'sub-sets' of your master database

to be distributed to various Macs in your home or office.

Thus you could provide a laptop at the bedside of your grandmother or guest which includes only the items which they might need to know about or control !

### Synchronizing the databases

**save snapshot:** save current values in database to disk file  
save snapshot file "file descriptor"

example : save snapshot file " "HD:Desktop Folder:XTensionf:Snap1"

**load snapshot:** load current values in file to database  
load snapshot file "file descriptor"

example : load snapshot file " "HD:Desktop Folder:XTensionf:Snap1"

These verbs (and menu items), will cause XTension to save a small file to disk which contains **only** the current state and values for each of the units in your database. Using the load snapshot verb, you can transfer this to another copy of XTension ( and the same database ). The result is that you synchronize the values between databases on two Macs.