

iDoctor installation instructions for nmon / Power users

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iDoctor now provides the ability to graph nmon data using SQLite as the analysis DB. This provides for the ability to graph large data sets, graph multiple files at once, and more.

Advantages to using iDoctor to analyze nmon data vs nmon Analyzer:

1. Clock icon, graphs can be redrawn at wider intervals. (i.e. convert 5 min intervals to 15 mins/etc).
2. Graph multiple collections at once. Select all desired collections from the list, then right-click and pick the graph of your choice. Many but not all support this.
3. If you have a large number of disks (> 150) you can graph/rank all of them at once instead of needing to look at DISKBUSY1, DISKBUSY2, etc individually. Graphing hundreds over time is of course still problematic but more feasible than what Excel will do since iDoctor will hide the disks with all 0 values.
4. Use of filtering options for graphs/tables to modify the graphs at run-time based on your needs.
5. Drill down into desired CPU, or disk over time graphs quite easily.

Installing iDoctor GUI

To install iDoctor you can either just download and run iDoctor and it will prompt you to install the additional software needed (.net and visual studio redistributable most likely)

iDoctor GUI download

<http://public.dhe.ibm.com/services/us/igsc/idoctor/iDoctorClientC01152.exe>

or here are the links to install these additional prerequisites:

1. Install this: (download the x86 option)
<http://www.microsoft.com/en-US/download/details.aspx?id=30679>
2. Install .Net 4.0 or higher (if needed)
<https://www.microsoft.com/en-us/download/details.aspx?id=30653>

SQLite Installation Instructions

If you wish to analyze nmon and in the future other types of AIX, HMC, Linux, etc performance data with iDoctor it is desirable to install the SQLite database engine and ODBC driver. This database is used by iDoctor to enhance the graphing options within the iDoctor GUI.

0) Be sure to review/agree to the legal /license terms for SQLite before proceeding.

<http://sqlite.org/copyright.html>

A) Download the SQLite DB engine and DLL

1. Download and extract the following 2 zip files to the same directory (Use C:\sqlite or change the Preference by using Edit-> Preferences -> Power -> SQLite installation directory within the GUI)
<https://www.sqlite.org/2015/sqlite-shell-win32-x86-3081002.zip>
<https://www.sqlite.org/2015/sqlite-dll-win32-x86-3081002.zip>

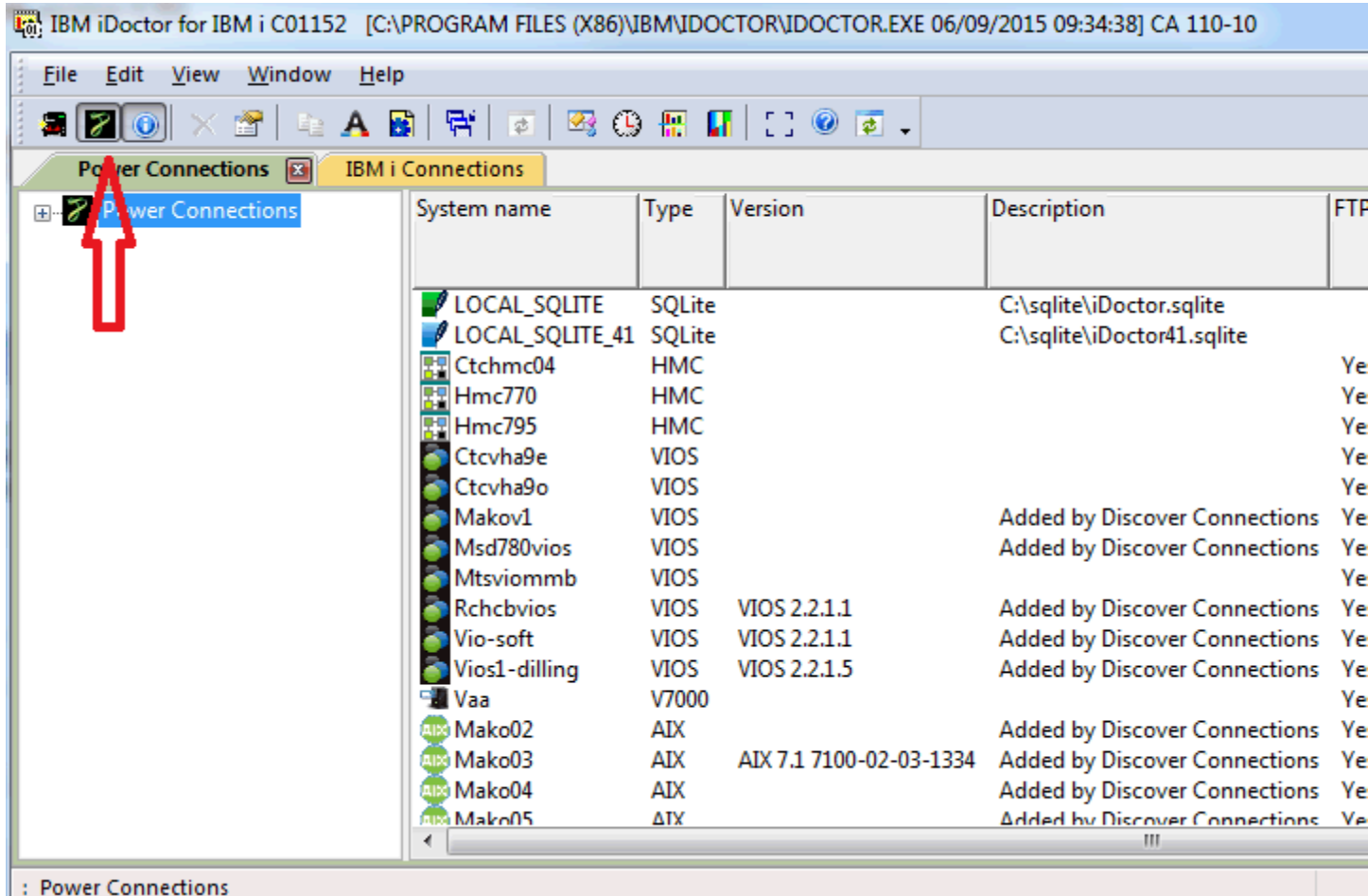
B) Download and install the SQLite ODBC Driver

Download and install this

<http://www.ch-werner.de/sqliteodbc/sqliteodbc.exe>

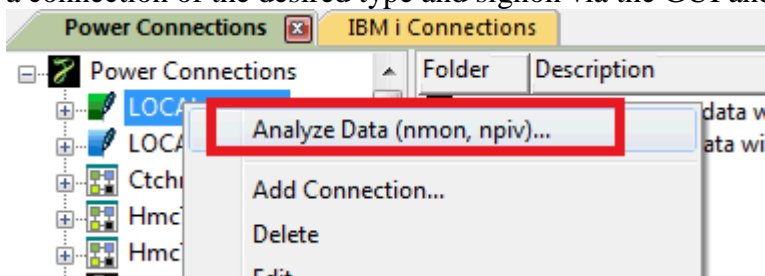
C) In the iDoctor GUI -> click the toolbar button shown in screenshot below to open Power Connections

1. An LOCAL_SQLITE option should be visible automatically. If desired you can also create AIX/Linux/VIOS or HMC connections from there. You can also create additional connections to SQLite databases for use with iDoctor.



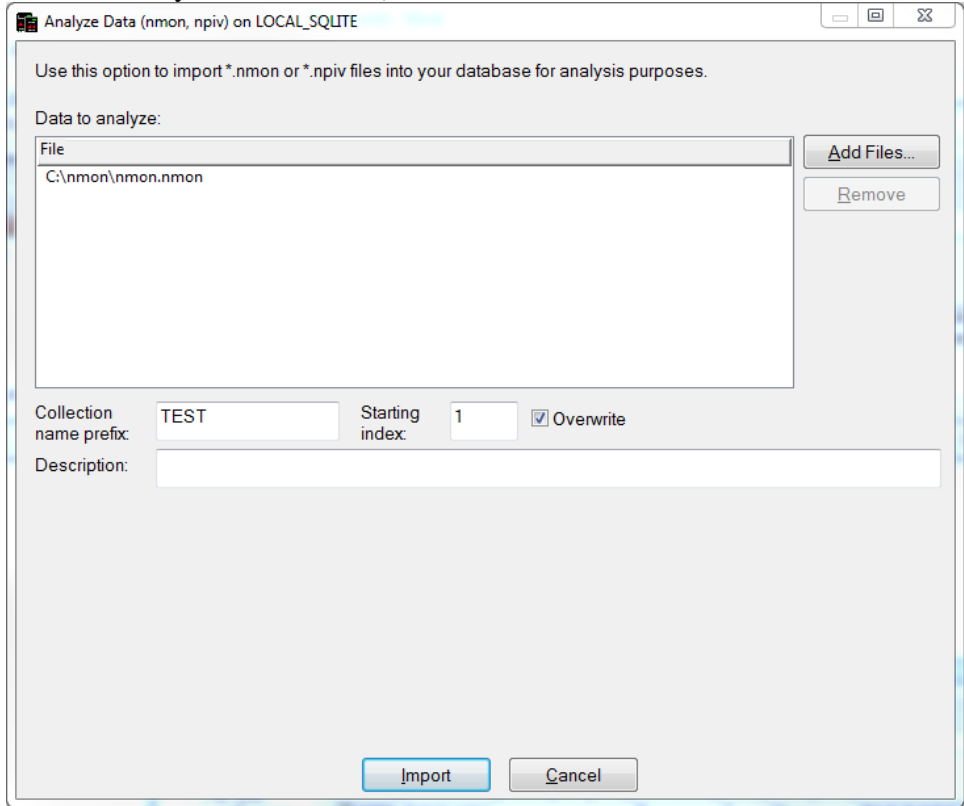
Next assuming SQLite files described above have been copied to C:\sqlite and the ODBC driver has been installed per instructions above. Right-click the LOCAL_SQLITE folder and use the Analyze data menu.

Note: You can also import files directly from AIX/VIOS/Linux using similar steps (but first add a connection of the desired type and signon via the GUI and expand the nmon folder)

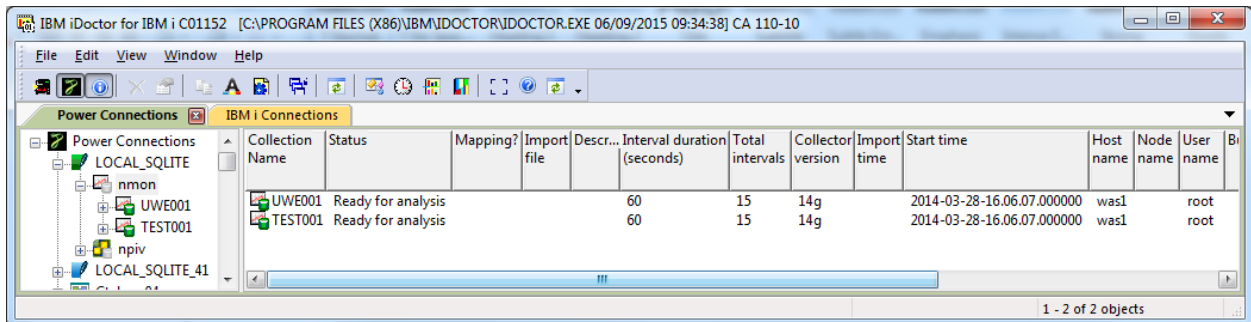


Then add your nmon file(s) and click import.

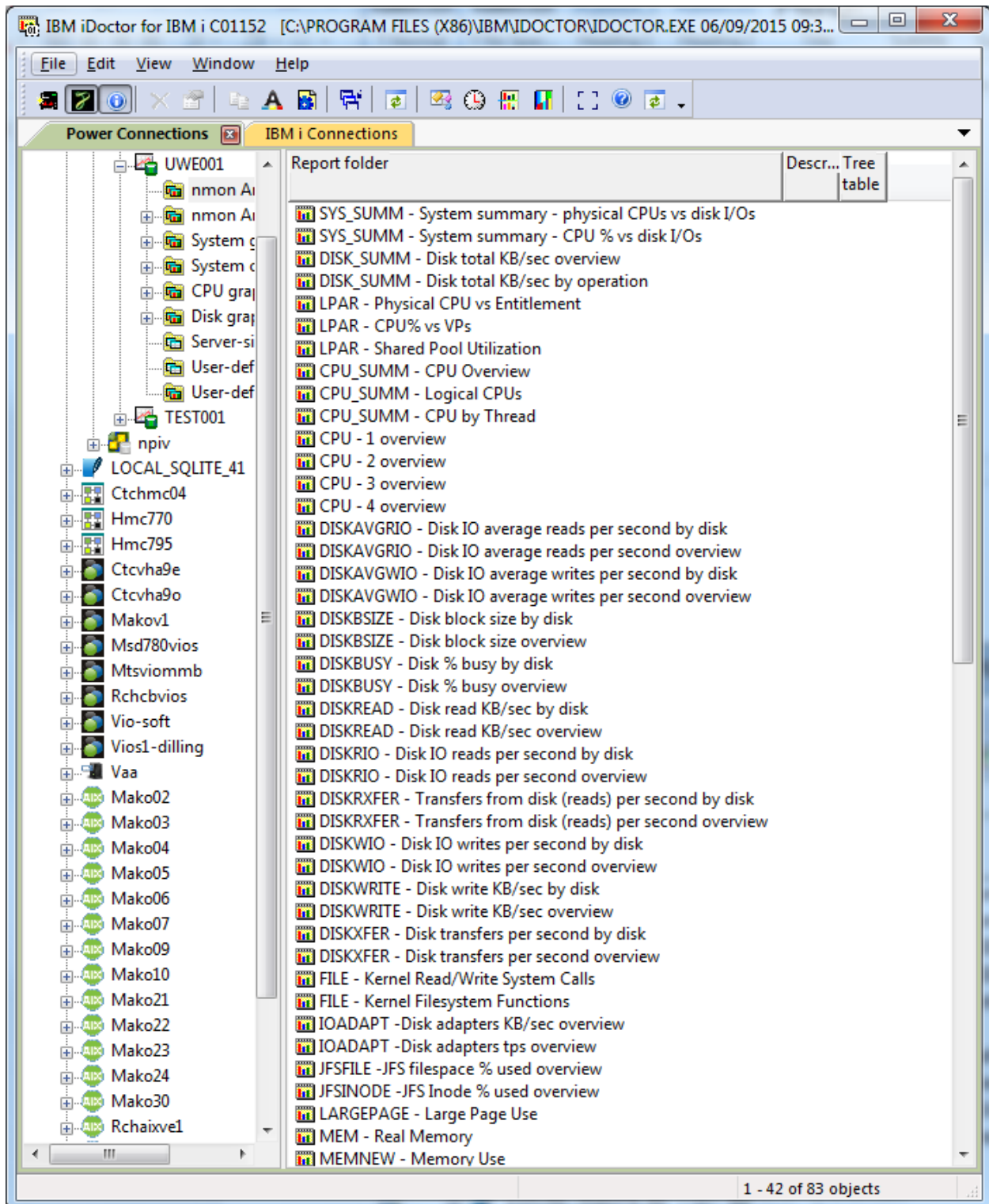
(If you encounter data that fails to import properly then I'd be happy to investigate, if you zip up and send me your nmon data.)

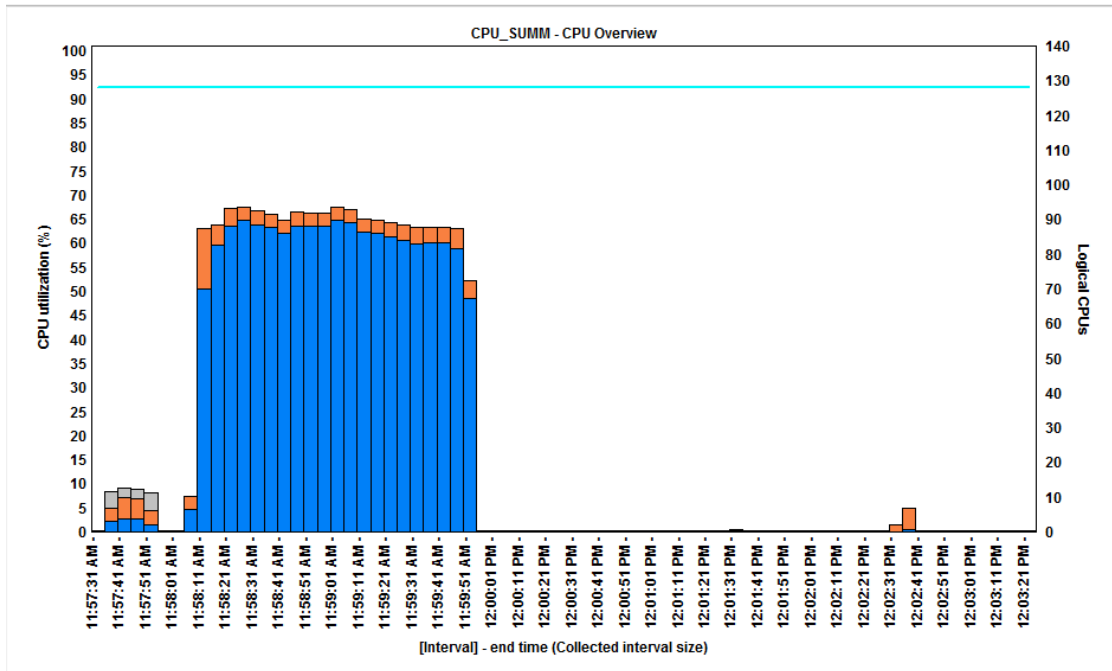


Afterwards just expand the nmon folder to view collections which contain the reports.

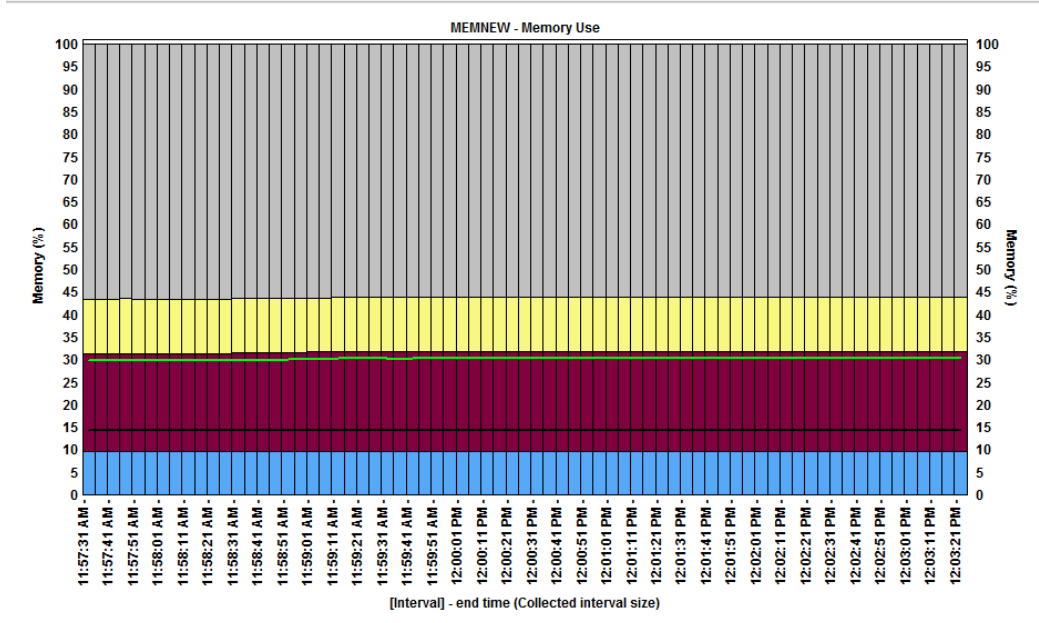


In the future I plan to organize these in sub folders but this is a list of all the nmon analyzer-like graphs.





X-axis (Labels)	
Interval end timestamp (INTENDSTR)	
Primary Y-axis (Bars)	
User CPU utilization (%) (USRCPUPT)	
System CPU utilization (%) (SYSCPUPT)	
CPU wait (%) (WAITCPUPT)	
Secondary Y-axis (Lines)	
Logical CPUs (CPUCOUNT)	
Flyover Fields	
Available Fields	
[Interval] - timestamp (TIMEINT)	
MBRNAME	
Interval number (INTERVAL)	
Minimum interval timestamp (MINDTETIM)	
Maximum interval timestamp (MAXDTETIM)	
Interval delta time (seconds) (DELATIME)	
Interval delta time (usecs) (INTUSECS)	
Physical number of CPUs (PHYSICAL_CPUS)	
CPU utilization (%) (TOTCPUPT)	
CPU idle (%) (IDLEPCT)	
Disk I/Os per second (DISKIO)	



X-axis (Labels)	
Interval end timestamp (INTENDSTR)	
Primary Y-axis (Bars)	
System % (MN_SYSPCT)	
Process % (MN_PROCESSPCT)	
File system cache % (MN_FSCACHEPCT)	
Free % (MN_FREEPCT)	
Secondary Y-axis (Lines)	
Pinned % (MN_PINNEDPCT)	
User % (MN_USERPCT)	
Flyover Fields	
Available Fields	
[Interval] - timestamp (TIMEINT)	
Interval number (INTERVAL)	
Interval delta time (usecs) (INTUSECS)	

For more information about SQLite, visit <https://www.sqlite.org/>