

HOWTO: Prepare for Performance Assessment

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Getting Ready for a Performance Assessment

These days I spend a lot of time on the road in my role as a consultant for STG Lab Services and Training going to customers to perform PowerCare Services . One of these services is a Performance Assessment. A couple of the things I do as part of the assessment is review current firmware and software levels and compatiability.

This is just a start. The number of reads, comments in the forums (yes, I will get around to approving your request to join the forums! Just make sure your email address is good, and check your junk/spam folder as rootvg.net is not always recognized as a valid mail server - unfortunately.) will affect the speed and depth of the updates. Before looking at performance data I want to be sure that firmware and software issues are not part of, or potential causes for performance concerns.

Step 1: Inventory Scout

You will need to download a recent copy of catalog.mic . The default file is a single text line just listing headers and the output file `/var/adm/invscout/hostname`.mup` is only as good as the catalog.mic (database) the system devices and adapters is compared with. The command is simply `invscout` with no arguments.

Step 2: Use the MDS webapp

Upload the `/var/adm/invscout/hostname`.mup` to the MDS (Microcode Discovery Site) to get a report and links to new microcode (when applicable). Note: the catalog.mic file is updated often and the MDS tool may complain that your catalog is one day old. Don't worry too much about that. But if it is months old I recommend downloading a current catalog.mic and re-running `invscout`.

Step 3: Verify Firmware and Software Levels

With microcode levels (system firmware!) and software levels at hand go to the FLRT (Fix Level Recommendation Tool) and verify that firmware and software levels are up to date and/or compatible.

Step 4. Setup/Control persistent monitoring

By default AIX now does so-called persistent binary monitoring for the last 7 days of data to /etc/perf/daily in files named `hostname`_YYMMDD.topas. For my assessments I am using various nmon_analyzers (as they are, unfortunately dependent on the version of nmon being used). This is started at boottime by an entry in /etc/inittab.

```
xmdaily:2:once:/usr/bin/topasrec -L -s 300 -R 1 -r 6 -o /etc/perf/daily/ -ypersistent=1 2>&1 >/dev/null #Start local binary recording
```

The binary (.topas) files can be converted to a format suitable for nmon_analyzer using the command topasout -a `hostname`_YYMMDD.topas. This creates the file `hostname`_YYMMDD.topas.csv. Hint: sort the `hostname`_YYMMDD.topas.csv before transferring it to your desktop/laptop as it helps load by the nmon_analyzer macros immensely.

Step 5. (Optional) Switch to .nmon collections

Optionally, you can stop the default binary (.topas) reports and start persistent nmon recordings. Use smit for this - fastpath is smitty topas.