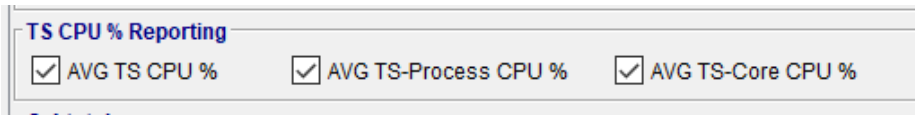


Test Server (TS) CPU % Measurements Feature

To understand this feature, one must first understand the architecture of the TS and the various modes, configurations and licenses in which it can be at any time. Legacy, Max Mode, Fireball Mode, single vs multiple TS-Processes, and the various cores that can be in use. The configuration, mode, and license of your TS will play a factor in how this feature works.

Each individual TS-Process reports the AVG CPU for each individual Core over a short period of time. Currently these are being reported in Run Log when over certain thresholds. With this feature, the TAS forwards these values to each test session that is running on the given TS-Process. Within the test session there are report options that can be enabled to display measurements for these CPU values. There are 3 levels of enablers for the TS-CPU measurements:



The “AVG TS CPU %” checkbox enables the Top level TS AVG. The test session calculates the sum AVG across all cores on all TS-Processes that the test is running on. For multi-core TSs (MAX / FIREBALL), if there is just 1 TS-Process used by the test on the TS (e.g. vTS), the Control AVG (Sum AVG of all Control cores, currently just 1, on the TS-Process) and Non-Control AVG (Sum AVG of all cores except Control-Core on the TS-Process) will also be shown.

The “AVG TS-Process CPU %” checkbox is only effective when there is more than one TS-Process used by the test on the TS, otherwise it has no effect. When used effectively, enables individual TS-Process AVG (Sum AVG of all cores on the TS-Process) and Control AVG (Sum AVG of all Control cores, currently just 1, on the TS-Process) and Non-Control AVG (Sum AVG of all cores except Control-Core on the TS-Process).

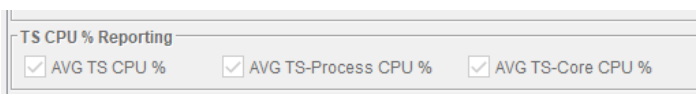
NOTE: You can also get individual Control AVG by looking at the single Control Core via the 3rd option, we are providing it as its own Control AVG so you don’t need option 3 as often and for the future when we may support more than one Control Core. On Legacy Mode TSs, there is just one Core so there is no Non-Control AVG reported. For single-process TSs, you get just single TS-Process measurements, without the TS-Process index, and the TS AVG will be displayed instead of TS-Process AVG.

The “AVG TS-Core CPU %” checkbox enables the individual Core AVGs to be displayed.

The various measurements might be best explained through pictures.

Single TS-Process Test Server (vTS) with Legacy Single-core:

With all enabled:



You will get just the single Control CORE reported values, plus the TS AVG (which should be the same).

Report View: Summary

Pass-Fail History TS CPU% Test Summary L3 Client L4 Client L5-7 Client L3 Server L4 Server L5-7 Server

Measurement	1	2	3	4	Current
Elapsed Time	15 Sec(s)	30 Sec(s)	45 Sec(s)	1 Min(s) 0 Sec(s)	1 Min(s) 2 Sec(s)
Actual Time	05/08 16:39:25	05/08 16:39:40	05/08 16:39:55	05/08 16:40:10	05/08 16:40:12
ts0(Coast-11.84):Control/0 (P-I)	29.5	43	43	43	0
ts0(Coast-11.84):AVG (P-I)	29.5	43	43	43	0

With just COREs:

TS CPU % Reporting

AVG TS CPU % AVG TS-Process CPU % AVG TS-Core CPU %

Report View: Summary

Pass-Fail History TS CPU% Test Summary L3 Client L4 Client L5-7 Client L3 Server L4 Server L5-7 Server

Measurement	1	2	3	4	Current
Elapsed Time	15 Sec(s)	30 Sec(s)	45 Sec(s)	1 Min(s) 0 Sec(s)	1 Min(s) 2 Sec(s)
Actual Time	05/08 16:42:50	05/08 16:43:05	05/08 16:43:20	05/08 16:43:35	05/08 16:43:37
ts0(Coast-11.84):Control/0 (P-I)	35	41	41	41	0

With just TS, just TS-Process, or BOTH:

TS CPU % Reporting

AVG TS CPU % AVG TS-Process CPU % AVG TS-Core CPU %

TS CPU % Reporting

AVG TS CPU % AVG TS-Process CPU % AVG TS-Core CPU %

TS CPU % Reporting

AVG TS CPU % AVG TS-Process CPU % AVG TS-Core CPU %

Report View: Summary

Pass-Fail History TS CPU% Test Summary L3 Client L4 Client L5-7 Client L3 Server L4 Server L5-7 Server

Measurement	3	4	5	6	Current
Elapsed Time	45 Sec(s)	1 Min(s) 0 Sec(s)	1 Min(s) 15 Sec(s)	1 Min(s) 30 Sec(s)	1 Min(s) 38 Sec(s)
Actual Time	05/08 16:45:23	05/08 16:45:38	05/08 16:45:53	05/08 16:46:08	05/08 16:46:16
ts0(Coast-11.84):AVG (P-I)	41	41	41	41	41

As you can see, with Legacy mode, just use the first option, "AVG TS CPU %". There is nothing provided for "AVG TS-Process CPU %". And the single CORE == TS AVG, there is no Control vs Non-Control, nor TS-Processes to compare.

Single TS-Process Test Server (vTS) with MAX-Mode multi-cores:

With all options enabled:

TS CPU % Reporting

AVG TS CPU % AVG TS-Process CPU % AVG TS-Core CPU %

You will get each individual CORE reported values, plus Control AVG, Non-Control AVG and TS AVG:

Measurement	1	2	3	4	Current
Elapsed Time	15 Sec(s)	30 Sec(s)	45 Sec(s)	1 Min(s) 0 Sec(s)	1 Min(s) 15 Sec(s)
Actual Time	05/09 08:33:05	05/09 08:33:20	05/09 08:33:35	05/09 08:33:50	05/09 08:34:05
ts0(kvm-xod-hp-191):Control/0 (P-I)	17	13.5	13	13	14
ts0(kvm-xod-hp-191):User/0 (P-I)	0	8	8	8	8
ts0(kvm-xod-hp-191):User/1 (P-I)	0	8	8	8	8
ts0(kvm-xod-hp-191):User/2 (P-I)	0	8	8	8	8
ts0(kvm-xod-hp-191):User/3 (P-I)	0	8	8	8	8
ts0(kvm-xod-hp-191):User/4 (P-I)	0	8	8	8	8
ts0(kvm-xod-hp-191):User/5 (P-I)	0	8	8	8	8
ts0(kvm-xod-hp-191):Control AVG (P-I)	17	13.5	13	13	14
ts0(kvm-xod-hp-191):Non-Control AVG (P-I)	0	8	8	8	8
ts0(kvm-xod-hp-191):AVG (P-I)	2.429	8.786	8.714	8.714	8.857
ts1(kvm-xod-hp-192):Control/0 (P-I)	18.5	15.5	16	14.5	15
ts1(kvm-xod-hp-192):User/0 (P-I)	0	2	2	2	2
ts1(kvm-xod-hp-192):User/1 (P-I)	0	2	2	2	2
ts1(kvm-xod-hp-192):User/2 (P-I)	0	3.5	3	3	3
ts1(kvm-xod-hp-192):User/3 (P-I)	0	3	3	3	3
ts1(kvm-xod-hp-192):User/4 (P-I)	0	3	3	3	3
ts1(kvm-xod-hp-192):User/5 (P-I)	0	3	2	2	3
ts1(kvm-xod-hp-192):Control AVG (P-I)	18.5	15.5	16	14.5	15
ts1(kvm-xod-hp-192):Non-Control AVG (P-I)	0	2.75	2.5	2.5	2.667
ts1(kvm-xod-hp-192):AVG (P-I)	2.643	4.571	4.429	4.214	4.429

With just COREs:

TS CPU % Reporting

AVG TS CPU %
 AVG TS-Process CPU %
 AVG TS-Core CPU %

Measurement	12	13	14	15	Current
Elapsed Time	3 Min(s) 0 Sec(s)	3 Min(s) 15 Sec(s)	3 Min(s) 30 Sec(s)	3 Min(s) 45 Sec(s)	3 Min(s) 47 Sec(s)
Actual Time	05/08 16:02:21	05/08 16:02:36	05/08 16:02:51	05/08 16:03:06	05/08 16:03:08
ts0(kvm-xod-hp-191):Control/0 (P-I)	13	14	13	13	0
ts0(kvm-xod-hp-191):User/0 (P-I)	3	3	3	3	0
ts0(kvm-xod-hp-191):User/1 (P-I)	4	4	3	3	0
ts0(kvm-xod-hp-191):User/2 (P-I)	3	3	3	3	0
ts0(kvm-xod-hp-191):User/3 (P-I)	3	3	6	6	0
ts0(kvm-xod-hp-191):User/4 (P-I)	3	3	3	3	0
ts0(kvm-xod-hp-191):User/5 (P-I)	3	3	3	3	0
ts1(kvm-xod-hp-192):Control/0 (P-I)	11	11	11	11.5	0
ts1(kvm-xod-hp-192):User/0 (P-I)	1	1	1	1	0
ts1(kvm-xod-hp-192):User/1 (P-I)	1	1	1	1	0
ts1(kvm-xod-hp-192):User/2 (P-I)	2	1	1	2	0
ts1(kvm-xod-hp-192):User/3 (P-I)	2	1	1	1.5	0
ts1(kvm-xod-hp-192):User/4 (P-I)	0	0	0	0	0
ts1(kvm-xod-hp-192):User/5 (P-I)	1	1	1	1	0

The TS-Core checkbox controls the inclusion of these individual core measurements.

With just TS, just TS-Process, or BOTH:

TS CPU % Reporting

AVG TS CPU %
 AVG TS-Process CPU %
 AVG TS-Core CPU %

TS CPU % Reporting

AVG TS CPU %
 AVG TS-Process CPU %
 AVG TS-Core CPU %

TS CPU % Reporting

AVG TS CPU %
 AVG TS-Process CPU %
 AVG TS-Core CPU %

Report View: Summary

TS CPU% Test Summary L3 Client L4 Client L5-7 Client L3 Server L4 Server L5-7 Server

Measurement	1	2	3	4	Current
Elapsed Time	15 Sec(s)	30 Sec(s)	45 Sec(s)	1 Min(s) 0 Sec(s)	1 Min(s) 15 Sec(s)
Actual Time	05/09 08:47:39	05/09 08:47:54	05/09 08:48:09	05/09 08:48:24	05/09 08:48:39
ts0(kvm-xxd-hp-191):Control AVG (P-I)	13.667	11	12	12	12
ts0(kvm-xxd-hp-191):Non-Control AVG (P-I)	6.389	3	3.083	3.167	3
ts0(kvm-xxd-hp-191):AVG (P-I)	7.429	4.143	4.357	4.429	4.286
ts1(kvm-xxd-hp-192):Control AVG (P-I)	15.333	15	13	14	14.5
ts1(kvm-xxd-hp-192):Non-Control AVG (P-I)	7.389	4	4	4	4
ts1(kvm-xxd-hp-192):AVG (P-I)	8.524	5.571	5.286	5.429	5.5

You get the AVG, Control AVG and Non-Control AVG on the only TS-Process on the TS (i.e. it's the TS AVG). On a Single TS-Process TS (i.e. vTS or non-Performance/Extreme), the "AVG TS CPU %" and "AVG TS-Process CPU %" options have the same effect.

Multi TS-Process Test Server (vTS) with Multi-Core:

The example below shows a test that uses just one TS-Process per TS, if it had used multiple, there would have been p1(1). It is: X=Test-TC-Group/Process-Index within the test session, Y=TS-Process-Index on the TS.

With all enabled:

TS CPU % Reporting

AVG TS CPU % AVG TS-Process CPU % AVG TS-Core CPU %

You will get all possible measurements about CPUs.

Report View: Summary

TS CPU% Test Summary L3 Client L4 Client L5-7 Client L3 Server L4 Server L5-7 Server

Measurement	1	2	3	4	Current
Elapsed Time	15 Sec(s)	30 Sec(s)	45 Sec(s)	1 Min(s) 0 Sec(s)	1 Min(s) 2 Sec(s)
Actual Time	05/09 08:51:32	05/09 08:51:47	05/09 08:52:02	05/09 08:52:17	05/09 08:52:19
ts0(C118):p0(0):Control/0 (P-I)	38.333	12	12	12	0
ts0(C118):p0(0):User/0 (P-I)	10.333	30	30	30	0
ts0(C118):p0(0):User/1 (P-I)	0	0	0	0	0
ts0(C118):p0(0):User/2 (P-I)	0	0	0	0	0
ts0(C118):p0(0):User/3 (P-I)	0	0	0	0	0
ts0(C118):p0(0):User/4 (P-I)	0	0	0	0	0
ts0(C118):p0(0):User/5 (P-I)	0	0	0	0	0
ts0(C118):p0(0):Control AVG (P-I)	38.333	12	12	12	0
ts0(C118):p0(0):Non-Control AVG (P-I)	1.722	5	5	5	0
ts0(C118):p0(0):AVG (P-I)	6.952	6	6	6	0
ts0(C118):AVG (P-I)	6.952	6	6	6	0
ts1(C119):p0(0):Control/0 (P-I)	36.333	7.5	7	7	0
ts1(C119):p0(0):User/0 (P-I)	11.667	34	34	34	0
ts1(C119):p0(0):User/1 (P-I)	0	0	0	0	0
ts1(C119):p0(0):User/2 (P-I)	0	0	0	0	0
ts1(C119):p0(0):User/3 (P-I)	0	0	0	0	0
ts1(C119):p0(0):User/4 (P-I)	0	0	0	0	0
ts1(C119):p0(0):User/5 (P-I)	0	0	0	0	0
ts1(C119):p0(0):Control AVG (P-I)	36.333	7.5	7	7	0
ts1(C119):p0(0):Non-Control AVG (P-I)	1.944	5.667	5.667	5.667	0
ts1(C119):p0(0):AVG (P-I)	6.857	5.929	5.857	5.857	0
ts1(C119):AVG (P-I)	6.857	5.929	5.857	5.857	0

You will get process indexes for all measurements except the top-level TS AVG.

To demonstrate the pX(Y) messaging, if I ran a second test with reserved processes on these same TSs, I would see this:

Report View: Summary

Pass-Fail History | TS CPU% | Test Summary | L3 Client | L4 Client | L5-7 Client | L3 Server | L4 Server | L5-7 Server

Measurement	6	7	8	9	Current
Elapsed Time	1 Min(s) 30 Sec(s)	1 Min(s) 45 Sec(s)	2 Min(s) 0 Sec(s)	2 Min(s) 15 Sec(s)	2 Min(s) 22 Sec(s)
Actual Time	05/10 10:57:26	05/10 10:57:41	05/10 10:57:56	05/10 10:58:11	05/10 10:58:18
ts0(C118):p0(1):Control/0 (P-I)	3	3	3	3	0
ts0(C118):p0(1):User/0 (P-I)	0	0	0	0	0
ts0(C118):p0(1):User/1 (P-I)	0	0	0	0	0
ts0(C118):p0(1):User/2 (P-I)	0	0	0	0	0
ts0(C118):p0(1):User/3 (P-I)	0	0	0	0	0
ts0(C118):p0(1):User/4 (P-I)	0	0	0	0	0
ts0(C118):p0(1):User/5 (P-I)	0	0	0	0	0
ts0(C118):p0(1):Control AVG (P-I)	3	3	3	3	0
ts0(C118):p0(1):Non-Control AVG (P-I)	0	0	0	0	0
ts0(C118):AVG (P-I)	0.429	0.429	0.429	0.429	0
ts1(C119):p0(1):Control/0 (P-I)	8	8	8	8	0
ts1(C119):p0(1):User/0 (P-I)	0	0	0	0	0
ts1(C119):p0(1):User/1 (P-I)	0	0	0	0	0
ts1(C119):p0(1):User/2 (P-I)	0	0	0	0	0
ts1(C119):p0(1):User/3 (P-I)	0	0	0	0	0
ts1(C119):p0(1):User/4 (P-I)	0	0	0	0	0
ts1(C119):p0(1):User/5 (P-I)	0	0	0	0	0
ts1(C119):p0(1):Control AVG (P-I)	8	8	8	8	0
ts1(C119):p0(1):Non-Control AVG (P-I)	0	0	0	0	0
ts1(C119):AVG (P-I)	1.143	1.143	1.143	1.143	0

Where the p0 shows that within this test session it's the first TS-Process being used, but on the TS, it's actually the 2nd TS process (1), because the previous test is already using the main/first TS-Process, TS-Process 0.

Same prefixes seen in the run log:

```
05/10 09:55:55.452:ts0(C118):p0(1)::tc0: Configure priorityTimerEn=0 in capacity
05/10 09:55:55.452:ts0(C118):p0(1)::tc0: State=STARTED
05/10 09:55:55.462:ts1(C119):p0(1)::tc0: Pre-Resolving state ARP_NONE with RS false
05/10 09:55:55.462:ts1(C119):p0(1)::tc0: State=STARTED
```

With just COREs:

TS CPU % Reporting

AVG TS CPU % AVG TS-Process CPU % AVG TS-Core CPU %

Report View: Summary

TS CPU% | Test Summary | L3 Client | L4 Client | L5-7 Client | L3 Server | L4 Server | L5-7 Server

Measurement	6	7	8	9	Current
Elapsed Time	1 Min(s) 30 Sec(s)	1 Min(s) 45 Sec(s)	2 Min(s) 0 Sec(s)	2 Min(s) 15 Sec(s)	2 Min(s) 20 Sec(s)
Actual Time	05/09 08:55:54	05/09 08:56:09	05/09 08:56:24	05/09 08:56:39	05/09 08:56:44
ts0(C118):p0(0):Control/0 (P-I)	12	12	12	11	0
ts0(C118):p0(0):User/0 (P-I)	30	30	30	28	0
ts0(C118):p0(0):User/1 (P-I)	0	0	0	0	0
ts0(C118):p0(0):User/2 (P-I)	0	0	0	0	0
ts0(C118):p0(0):User/3 (P-I)	0	0	0	0	0
ts0(C118):p0(0):User/4 (P-I)	0	0	0	0	0
ts0(C118):p0(0):User/5 (P-I)	0	0	0	0	0
ts1(C119):p0(0):Control/0 (P-I)	14	14	14	14	0
ts1(C119):p0(0):User/0 (P-I)	34	34	34	34	0
ts1(C119):p0(0):User/1 (P-I)	0	0	0	0	0
ts1(C119):p0(0):User/2 (P-I)	0	0	0	0	0
ts1(C119):p0(0):User/3 (P-I)	0	0	0	0	0
ts1(C119):p0(0):User/4 (P-I)	0	0	0	0	0
ts1(C119):p0(0):User/5 (P-I)	0	0	0	0	0

You get each Core and the Process Indexes indicated on multi-process TS (regardless of the TS-Process CPU % setting). If using process reservation, this would indicate which actual TS-Process you are running on, even if only using 1 TS-Process.

With just TS:

TS CPU % Reporting

AVG TS CPU % AVG TS-Process CPU % AVG TS-Core CPU %

Report View: Summary

TS CPU% Test Summary L3 Client L4 Client L5-7 Client L3 Server L4 Server L5-7 Server

Measurement	1	2	3	4	Current
Elapsed Time	15 Sec(s)	30 Sec(s)	45 Sec(s)	1 Min(s) 0 Sec(s)	1 Min(s) 3 Sec(s)
Actual Time	05/09 09:48:34	05/09 09:48:49	05/09 09:49:04	05/09 09:49:19	05/09 09:49:22
ts0(C118):Control AVG (P-I)	37	13	13	13	0
ts0(C118):Non-Control AVG (P-I)	7.944	4	4	4	0
ts0(C118):AVG (P-I)	12.095	5.286	5.286	5.286	0
ts1(C119):Control AVG (P-I)	38	15	15	15	0
ts1(C119):Non-Control AVG (P-I)	8.778	3.333	3.333	3.333	0
ts1(C119):AVG (P-I)	12.952	5	5	5	0

Since we're only using one TS-Process in the test, the TS's AVG == TS-Process AVG, and we get AVG, Control AVG and Non-Control AVG reported at TS level, without Process Indexes indicated.

With just the TS-Process enabled:

TS CPU % Reporting

AVG TS CPU % AVG TS-Process CPU % AVG TS-Core CPU %

Subtotals

Report View: Summary

TS CPU% Test Summary L3 Client L4 Client L5-7 Client L3 Server L4 Server L5-7 Server

Measurement	16	17	18	19	Current
Elapsed Time	4 Min(s) 0 Sec(s)	4 Min(s) 15 Sec(s)	4 Min(s) 30 Sec(s)	4 Min(s) 45 Sec(s)	4 Min(s) 51 Sec(s)
Actual Time	05/09 09:43:53	05/09 09:44:08	05/09 09:44:23	05/09 09:44:38	05/09 09:44:44
ts0(C118):p0(0):Control AVG (P-I)	12	12	12	12	0
ts0(C118):p0(0):Non-Control AVG (P-I)	3.667	3.667	3.667	3.667	0
ts0(C118):p0(0):AVG (P-I)	4.857	4.857	4.857	4.857	0
ts1(C119):p0(0):Control AVG (P-I)	14	14.5	14	14.5	0
ts1(C119):p0(0):Non-Control AVG (P-I)	3.667	3.667	3.667	3.667	0
ts1(C119):p0(0):AVG (P-I)	5.143	5.214	5.143	5.214	0

Since we didn't ask for TS AVG, we get the TS-Process AVGs (same as TS since single process test), but now we indicate the TS-Process indexes.

With both TS & TS-Process enabled:

TS CPU % Reporting

AVG TS CPU % AVG TS-Process CPU % AVG TS-Core CPU %

Report View: Summary

TS CPU% Test Summary L3 Client L4 Client L5-7 Client L3 Server L4 Server L5-7 Server

Measurement	1	2	3	4	Current
Elapsed Time	15 Sec(s)	30 Sec(s)	45 Sec(s)	1 Min(s) 0 Sec(s)	1 Min(s) 3 Sec(s)
Actual Time	05/09 09:55:38	05/09 09:55:53	05/09 09:56:08	05/09 09:56:23	05/09 09:56:26
ts0(C118):p0(0):Control AVG (P-I)	30	13	13	13	0
ts0(C118):p0(0):Non-Control AVG (P-I)	15.542	4	4.083	4.167	0
ts0(C118):AVG (P-I)	17.607	5.286	5.357	5.429	0
ts1(C119):p0(0):Control AVG (P-I)	40.667	15	15	15	0
ts1(C119):p0(0):Non-Control AVG (P-I)	20.944	3.5	3.5	3.5	0
ts1(C119):AVG (P-I)	23.762	5.143	5.143	5.143	0

Here you are requesting TS-Process level information, so it's given for the Control/Non-Control AVGs including TS-process indexes. However, for the AVG the TS level AVG trumps the TS-Process AVG. Compare the TS, TS-Process and TS+TS-Process options.

The General Guideline would be this:

- If your test only ever uses one TS-Process, never enable the TS-Process CPU option.
- If you use only vTSs, never enable the TS-Process CPU option.
- If using Multi-Core Mode TS (MAX/FIREBALL), always enable the TS-Process CPU option, TS only is optional.

For automation, querying the measurements in situations when TS configuration/mode/license changes, the names of the measurements will change. Automation can be guaranteed to maintain the same TS-Index, tsN (name), and same TS-Process Index Y, pX(Y), and same suffixes, "AVG", "Control AVG", and "Non-Control AVG". CPU Core names should fall into 3 names, Control/N, User/N, or Data/N

Measurement Details

The measurements will be display in P-I mode by default, as the TAS will calculate the AVGs based on Total Reported Values / # of reported values, so we can accurately provide P-I AVG, like we can for TC measurements, where the P-I value is the actual average value that occurred in the interval and not just the change in AVG between two intervals. If you put the measurement into Cumulative mode, you will see the CPU% as it averaged over the entire time of the test. WARNING: These are rough numbers, the timing of the CPU % is not promised to be lined up with Elapsed Time, these CANNOT and SHOULD NOT be used to say that some CPU % happened in exact < 15s period.

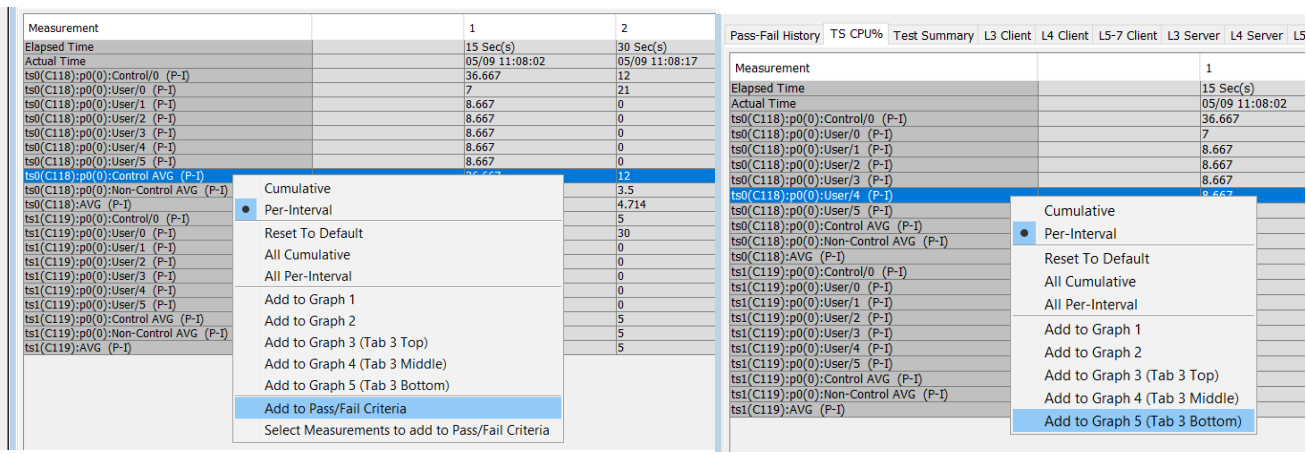
As with Pass-Fail History, if the # of CPU measurements > 250, they will be placed on multiple tabs with index numbers. We only support 250 measurements per tab. We recommend that for tests with using many multi-Core TSs, you do not enable the CORE-level CPU measurements.

These measurements cannot be made favorites for now.

- They are already on their own TAB(s)
- The names can change depending upon TS config/mode/license and test configuration.

Pass Fail Criteria

The AVG TS CPU Measurements can be added to Pass/Fail Criteria, the individual COREs cannot:



Pass/Fail Criteria editor:

View/Edit Criterion

Name Custom name for condition

Refresh ts1(C119):AVG CPU% > 12

Condition TS CPU % Result Type PASS

Start = Start of Test

Stop = Never

Expire = End of Iteration

Reset = Start of Iteration

Test Server TS1

Process-Index @TS-Level

Measurement AVG

Operator > Value 12 Per-Interval

Save Cancel

We have added some other new features to Pass/Fail Criteria, including the ability to give them a custom name to use in place of the condition description, and displaying the current description in the editor, manually refreshed.

For the CPU Criterion, you can pick the TS, TS-Process and choose between AVG, Control AVG or Non-Control AVG to apply check to. The default setting is to check values in per-interval mode; however, you could check against the cumulative test average. We only recommend testing against > or >= operator, since 0 values may be possible at times, anything with < or <= will always trigger. We are leaving in the other operators for now, in case there are ways to make them useful.

WRT to the variation in the TS vs TS-Process level measurements occur, the TAS will do it's best to match up criteria when things change. For example, if you configure it for TS-Level Control AVG, but when you run the test the Control AVG ends up in TS-Process Level, the TAS should still make the association. If tests and TSs change, I suspect the Criteria may have to change too, but we'll see how this goes in practice.