

PLMPerformanceAnalyse V4 Installation Configuration Usage and Documentation

1. [Introduce PLMPerformance Analyse V4 \(PPAV4\)](#)
2. [System Sketch – Overview](#)
3. [Install PLMPerformance Analyse](#)
4. [Config PLMPerformance Analyse](#)
5. [Using PLMPerformance Analyse](#)
6. [Documentation Options - Environ variables](#)
7. [PLMPerf Graphs Examples](#)
8. [Default Assemblies](#)
9. [Glossary](#)

1. [Introduce PLMPerformance Analyse V4 \(PPAV4\)](#)
2. [System Sketch – Overview](#)
3. [Install PLMPerformance Analyse](#)
4. [Config PLMPerformance Analyse](#)
5. [Using PLMPerformance Analyse](#)
6. [Documentation Options - Environ variables](#)
7. [PLMPerf Graphs Examples](#)
8. [Default Assemblies](#)
9. [Glossary](#)

PLM – Performance Analyse

The PLMPerformance Analyse software is a solution for automated and permanent performance measurements for NX in the TC Environment

Description:

All complex software solutions are evaluated in addition to the software quality, especially on performance behavior. The software performance is perceived as a “felt speed” by almost all users. Experience has shown that the performance decreases permanently and that this is perceived, discussed and criticized only after a reduction of 30% -40%. This often leads to unusable statements that make it difficult to improve the performance of the system. A particularly problem is to evaluate the impact of individual measures in time relation, if no continuous measurements are available.

To improve this situation, we developed the **PLMPerformanceAnalyse (PPA)**

The software supplies:

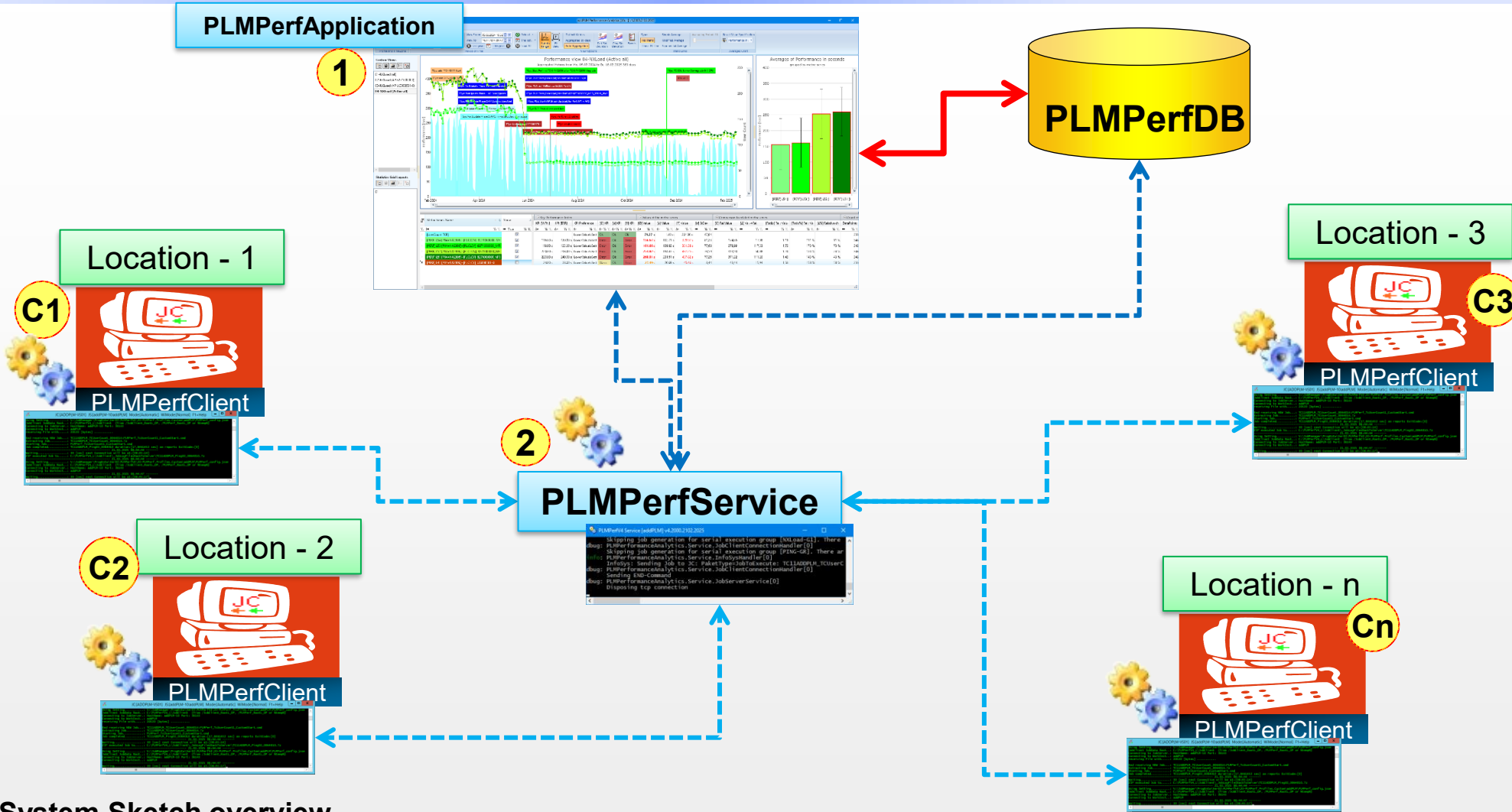
- Performance data on **loading assemblies**
- Performance data on **starting TeamCenter and NX** for each workstation
- the **user count of logged in users in TC**
- location-based ping times
- an interactive user interface that displays the data graphically and time-based

With this solution you achieve:

- objective evaluation of the system performance
- it helps to identify all kinds of performance degradation
- it delivers important data to detect time-based performance problem

1. [Introduce PLMPerformance Analyse V4 \(PPAV4\)](#)
2. [System Sketch – Overview](#)
3. [Install PLMPerformance Analyse](#)
4. [Config PLMPerformance Analyse](#)
5. [Using PLMPerformance Analyse](#)
6. [Documentation Options - Environ variables](#)
7. [PLMPerf Graphs Examples](#)
8. [Default Assemblies](#)
9. [Glossary](#)

Acquire of measurement data: System sketch



System Sketch overview

- PLMPerfApplication** (1) Defines + Config Measurements Jobs + Graphs // View + Analyses Measurement Data
- PLMPerfService** (2) Sending Jobs to PLMPerfClients and Receives Results stores data into PLMPerfDB
- PLMPerfClient** (C1..Cn) executes the PLMPerfJob (NXJournal) and send PerfData to PLMPerfServices



List of Required Resources and Hardware

This list contains a list of all computers and resources required to run PLMPerformanceAnalyse.

Pos.	Title	Count	Description
1	Resource: Network share	1	Locate PLMPerformanceAnalyse Software ~ 1GB Locate PLMPerformanceAnalyse generated logfiles ~ 500 MB
2	Computer for: JobServer	1	Hardware requirements: <ul style="list-style-type: none">- Min 16 GB memory more is better- Min 10 GB free hard disk space on the local disks- Min 1xCPU with 4 Cores Software requirements: <ul style="list-style-type: none">- Win10-64 BIT -//- Win11-64 BIT (testing)- WinServer 2022- Installed .Net Framework 4.8
3	Computer for: JobClients	2	Hardware requirements: <ul style="list-style-type: none">- 64 Bit OS System- min 25 GB free disk space on local drive.- min 50 GB free disk space on local drive hosting fccCache Software requirements: <ul style="list-style-type: none">- Win11-64 BIT- Installed .Net Framework 4.8- Required PLM Applications TC/NX must be available and configured
4	Resource: SQL DB	1	SQL Database for PLMPerformanceAnalyse // Start Größe 500 MB SQL Server Basic configuration: <ul style="list-style-type: none">- Protocol: TCP/IP- SQL Server Authentication (login via user/password)- Suggestion: User: PLMPerf PW: \$Edc4rfv- Full authorization on PerfManger DB instance- db_owner roll need to be set for PLMPerf Db User- Settings: SET COLLATE=Latin1_General_CI_AS
5	NX Daten		Definition of one or more measuring modules
6	OS User		System User for the OS login on the PerfClient CAD User PerfClient service must be able to be started under the CADADMINConfigure PerfServer with Local System User Access to the PerfClient + PerfServer for CADADMIN via RDP or similar.
7	IT		communication PerfClinet - PerfServer Port 36142 + 36134 is configurable.

1. [Introduce PLMPerformance Analyse V4 \(PPAV4\)](#)
2. [System Sketch – Overview](#)
3. [Install PLMPerformance Analyse](#)
4. [Config PLMPerformance Analyse](#)
5. [Using PLMPerformance Analyse](#)
6. [Documentation Options - Environ variables](#)
7. [PLMPerf Graphs Examples](#)
8. [Default Assemblies](#)
9. [Glossary](#)

Installation

Steps:

1. Download PLMPerfV4.Setup.zip Setup from Web
 - <https://download.addplm.com/PLMPerfV4/01-LatestVersion-setup/>
2. Unzip

Setup

Setup BASE + Database (after installation)

01-Install_and_Setup

- 00-PLMPerfV4 INIT (1x)
- >> 01-PLMPerfV4 Start Toolbar Manager (SystemTrayMenu.exe)
- 02-PLMPerfV4 Setup Menu
- 10----- (PLMPerf Setup Service) -----
- 11-PLMPerf Setup Settings+DB (addPLM)
- 13-PLMPerf Start Service (addPLM)
- 20----- (PLMPerf Update Service) -----
- 91-PLMPerf Hosts Setup CMD Defaults
- 92-PLMPerf Software Update
- 93-PLMPerf Software distribute to Local Computer

PLM Performance Analytics - Setup

Service configuration
Database maintenance
Application Service console

Configuration source: File D:\addPLM\JobManager\ProgEntw\Ver03\PLMPerfV4\20-PLMPerf.Profiles.Custom\addPLM\PLMPerf_config.js

10 - Network

Application Service Hostname or IP-Address	addPLM-10
JobClientServer Port	13002
JobClientServer IP-Address binding	
Application Service Port	13003
Application Service IP-Address binding	0.0.0.0

20 - Database connection

Database Server (MSSQL)	ADDPLM-10\DEV2019
Database name	PLMPerfAnalyse_addPLM1

30 - Database access for PLMPerformanceAnalytics GUI

Authentication method	SqlServerAuthentication
Username	PLMPerf
Password	*****

30 - Database access for PLMPerformanceAnalytics service

Authentication method	SqlServerAuthentication
Username	PLMPerf
Password	*****

40 - Directory overrides

Save settings

Do you want to save the settings to the application service?

Ja Nein Abbrechen

PLM Performance Analytics - Setup

Service configuration
Database maintenance
Application Service console

Database Server: ADDPLM-10\DEV2019 Windows Authentication Login Username: PLMPerf

Database Name: PLMPerfAnalyse_addPLM1 SQL Authentication Password: *****

Try to connect to the database / Update information

Database Folder: D:\MSSQL-Server\MSSQL15.DEV2019\MSSQL\DATA Database File (Lmdf): PLMPerfAnalyse_addPLM1.lmdf

Transaction-Log Folder: D:\MSSQL-Server\MSSQL15.DEV2019\MSSQL\DATA Transaction-Log File (Lidf): PLMPerfAnalyse_addPLM1.lidf

Database Status: The Database exists and contains application objects.

Create new empty Database Create or Update Database schema Update aggregated metrics Migrate legacy PPA-Database

PLMPerformanceAnalytics [20.08.25 08:20:57] --

Connecting and updating database information... Done.

Connected to: ADDPLM-10\DEV2019

Microsoft SQL Server 2019 (RTM-GDR) (KB5063758) - 15.0.2140.1 (X64)

Jul 14 2025 12:48:00

Copyright (C) 2019 Microsoft Corporation

Developer Edition (64-bit) on Windows 10 Pro 10.0 <X64> (Build 19045:)

Updating all aggregated metrics for all configured timezones... [20.08.25 08:21:01] --

Aggregating metrics from 26 metric series and 5 timezones.

- metric serie Ping02 (www.siemens.com)	loading metrics...	4.197 metrics loaded. Aggregating...
- metric serie Ping01 (www.addPLM.com)	loading metrics...	39.857 metrics loaded. Aggregating...
- metric serie Ping03 (www.siemens.com)	loading metrics...	36.924 metrics loaded. Aggregating...
- metric serie PLMPerfExport3 (BOM: YES/CLCY)	loading metrics...	3.882 metrics loaded. Aggregating...
- metric serie PLMPerfExport1 (BOM: NO/CLCY)	loading metrics...	3.273 metrics loaded. Aggregating...
- metric serie PLMPerfExport2 (BOM: NO/CLCY)	loading metrics...	128 metrics loaded. Aggregating...
- metric serie PLMPerfExport4 (BOM: YES/CLCY)	loading metrics...	142 metrics loaded. Aggregating...
- metric serie TC-UserCount	loading metrics...	1.942 metrics loaded. Aggregating...

Action: Updating all aggregated metrics for all configured timezones... Result: done (0.66) 20.08.2025 08:21

PLMPerfV4 Service [WuH] v4.2000.1802.2025

The PPA database requires a schema update.

PLMPerformanceAnalytics.Data.DatabaseSchemaVersionException

at PLMPerformanceAnalytics.Data.Session.ThrowOnDatabaseS

at PLMPerformanceAnalytics.Data.Session.Initialize(Datab

at PLMPerformanceAnalytics.Service.DataSessionInitializ

dbug: Microsoft.AspNetCore.Server.Kestrel.Transport.NamedPipes[1]

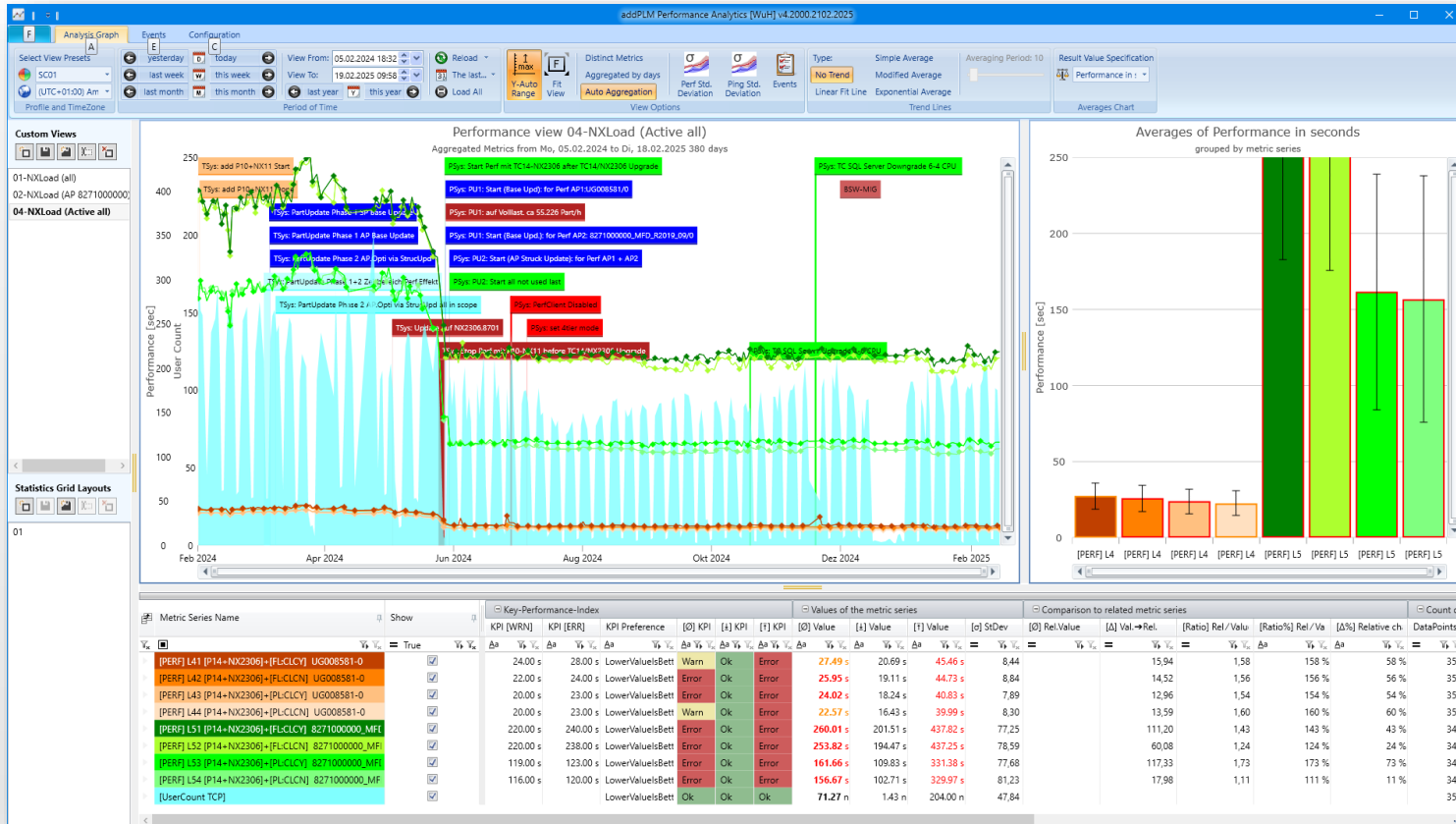
Connection id "0HNAGU0Q11U48" accepted.

dbug: Microsoft.AspNetCore.Server.Kestrel.Connections[39]

1. [Introduce PLMPerformance Analyse V4 \(PPAV4\)](#)
2. [System Sketch – Overview](#)
3. [Install PLMPerformance Analyse](#)
4. [Config PLMPerformance Analyse](#)
5. [Using PLMPerformance Analyse](#)
6. [Documentation Options - Environ variables](#)
7. [PLMPerf Graphs Examples](#)
8. [Default Assemblies](#)
9. [Glossary](#)

1. [Introduce PLMPerformance Analyse V4 \(PPAV4\)](#)
2. [System Sketch – Overview](#)
3. [Install PLMPerformance Analyse](#)
4. [Config PLMPerformance Analyse](#)
5. [Using PLMPerformance Analyse](#)
6. [Documentation Options - Environ variables](#)
7. [PLMPerf Graphs Examples](#)
8. [Default Assemblies](#)
9. [Glossary](#)

Using PLMPerformance Analyse'



Mouse Actions:

- Zoom horizontal
- **Zoom horizontal + vertical**
- Pan 'horizontal + vertical'
- Zoom 'horizontal + vertical'
- Zoom horizontal
- Zoom 'vertical'
- Fit All 'horizontal + vertical'
- Fit vertical
- Fit horizontal

MBL drag from Point-1 to Point-2

Shift + MBL drag from Point-1 to Point-2

Shift + MBL

Shiftfff + Scroll MW

Scroll MW

Ctrl + Scroll MW

push Key F

push Key V

push Key H

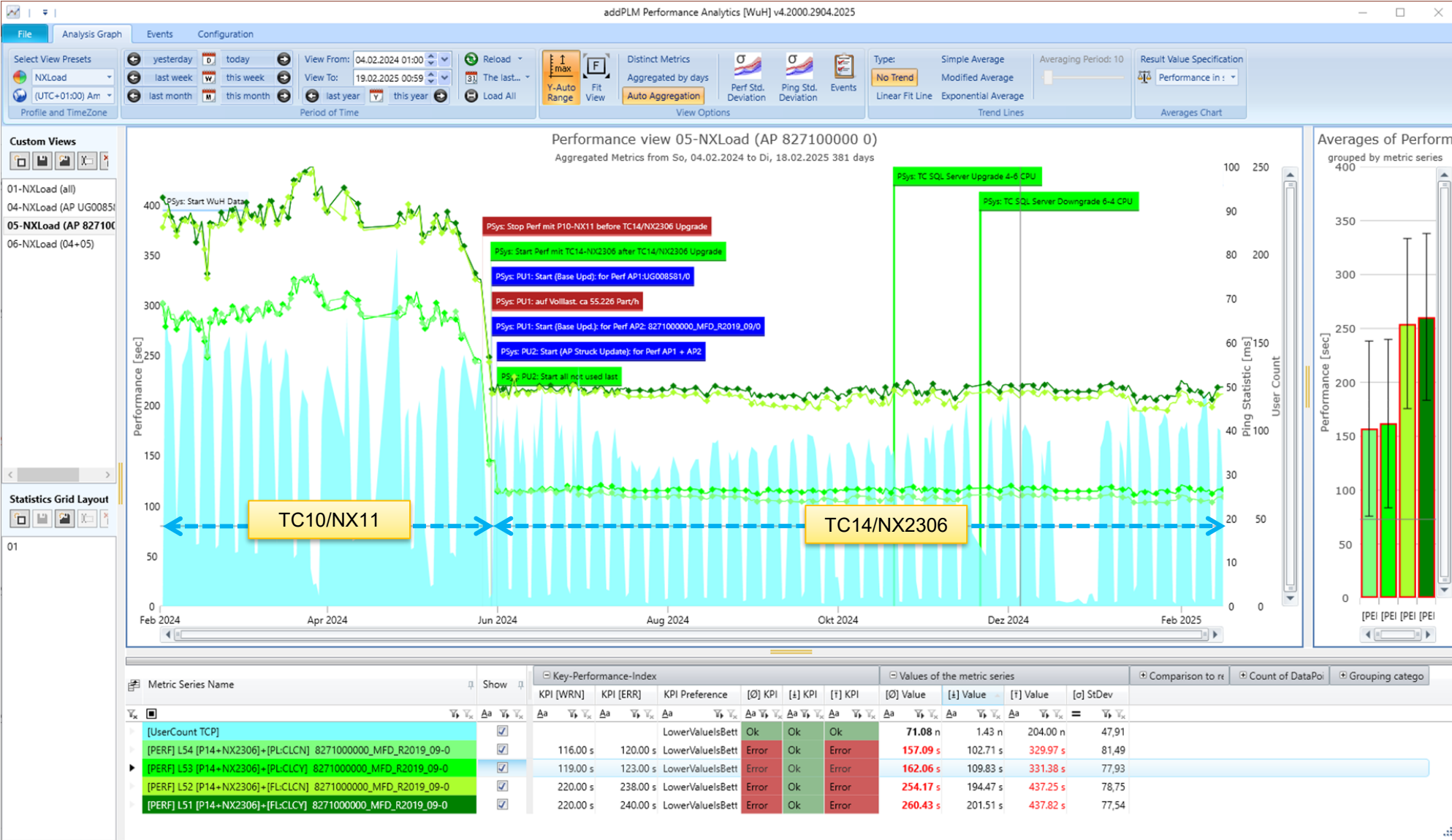
1. [Introduce PLMPerformance Analyse V4 \(PPAV4\)](#)
2. [System Sketch – Overview](#)
3. [Install PLMPerformance Analyse](#)
4. [Config PLMPerformance Analyse](#)
5. [Using PLMPerformance Analyse](#)
6. [Documentation Options - Environ variables](#)
7. [PLMPerf Graphs Examples](#)
8. [Default Assemblies](#)
9. [Glossary](#)

No	Typ	Name	Description:	Example:
01	Env	PLMPerf_Root_DP	Root at global Share	
02	Env	PLMPerf_RootL_DP	local Root at host	
03	Para	-PLMPerf_Root_DP	Root at global Share	
04	Para	-p	Profile name	
05	Env	JobClient_ServerProvidedResources_DP	SourcePath to	%PPA_RootL_DP%\JobClient_ServerProvidedResources\2024-10-22__13-12-24
06	File	JobClient Logfiles	Root Path for logfiles is set to env: %PPA_RootL_DP%	"D:\PLMPerfV4_L\JobClientService.log" "D:\PLMPerfV4_L\JobClient_UnhandledException.log"

← In Work J.Fes / 17.02.2025 →

1. [Introduce PLMPerformance Analyse V4 \(PPAV4\)](#)
2. [System Sketch – Overview](#)
3. [Install PLMPerformance Analyse](#)
4. [Config PLMPerformance Analyse](#)
5. [Using PLMPerformance Analyse](#)
6. [Documentation Options - Environ variables](#)
7. [PLMPerf Graphs Examples](#)
8. [Default Assemblies](#)
9. [Glossary](#)

Example: Long-term Measurements TC10/NX11 – TC14/NX2306



Example: Long-term Measurements Multi Locations



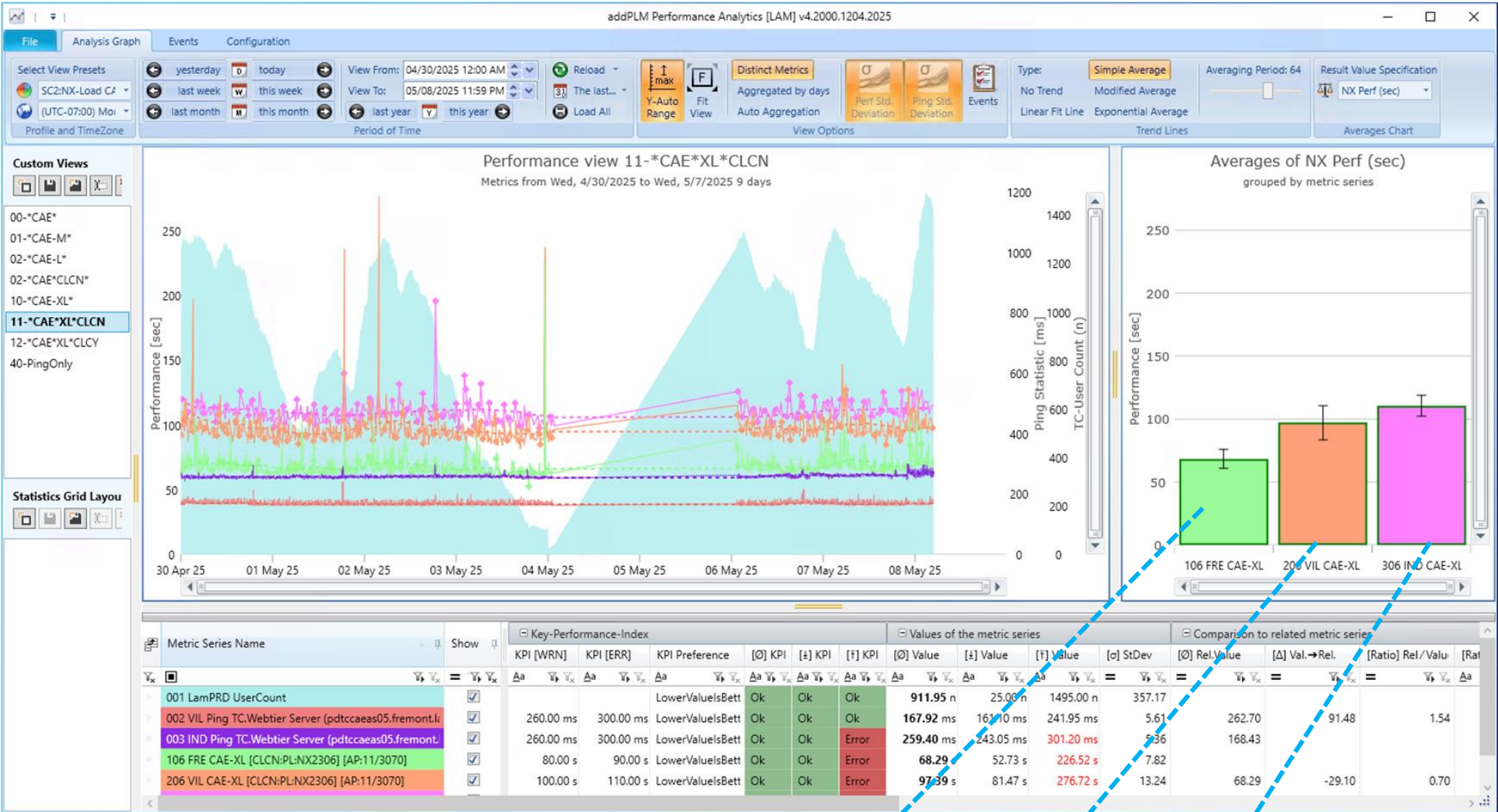
Clear cache: Yes

US/NX

Austria

India

Example: Long-term Measurements Multi - Locations



Clear cache: NO

US/NX

Austria

India

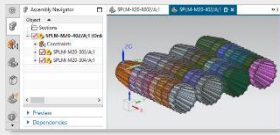
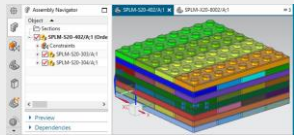
1. [Introduce PLMPerformance Analyse V4 \(PPAV4\)](#)
2. [System Sketch – Overview](#)
3. [Install PLMPerformance Analyse](#)
4. [Config PLMPerformance Analyse](#)
5. [Using PLMPerformance Analyse](#)
6. [Documentation Options - Environ variables](#)
7. [PLMPerf Graphs Examples](#)
8. [Default Assemblies](#)
9. [Glossary](#)

Source Data :

Content	Location / Source	
Root Dir	..\PLMPerfV4\94-NXPerfAssemblies	
7Z Packets	nx-7.5.3.3_performance_data_package_v3.7.7z nx-7.5.3.3_performance_data_package_v3-0Okmnji9.7z	

Assembly Data by Assembly size

No	Assembly Type	Source Dir	Top AP	AP Levels/CompAll/UnicComp (n)
01	smal	..\nx-7.5.3.3_performance_data_package_v3.7\smal	SPLM-S20-402_A.prt	SPLM-S20-402/A 6/94/94
02	medium	..\nx-7.5.3.3_performance_data_package_v3.7\medium	SPLM-M20-402_A.prt	SPLM-M20-402/A 6/94/94 SPLM-M20-303/A 5/46/46 SPLM-M20-304/A 5/46/46
03	large	..\nx-7.5.3.3_performance_data_package_v3.7\large Geometric Complexity is hig	SPLM-L20-402_A.prt	SPLM-L20-402/A 6/94/94 SPLM-L20-303/A 5/46/46 SPLM-L20-304/A 5/46/46
04	xlarge	..\nx-7.5.3.3_performance_data_package_v3.7\xlarge	SPLM-X00-0003_A.prt	SPLM-X00-0003/A 11/3070/3070 SPLM-X20-8001/A 10/1534/1534 SPLM-X20-8002/A 10/1534/1534



1. [Introduce PLMPerformance Analyse V4 \(PPAV4\)](#)
2. [System Sketch – Overview](#)
3. [Install PLMPerformance Analyse](#)
4. [Config PLMPerformance Analyse](#)
5. [Using PLMPerformance Analyse](#)
6. [Documentation Options - Environ variables](#)
7. [PLMPerf Graphs Examples](#)
8. [Default Assemblies](#)
9. [Glossary](#)

No	SORT	Long	Description	Notes	Dates
01	KPI	Key-Performance-Indicator (KPI)	See also at Wikipedia: https://de.wikipedia.org/wiki/Key_Performance_Indicator		
02	SCxx	Perf Scenario			
	FL	Fully Load	NX Assembly part load option		
	PS	Partial Load			
	ML	Minimal Load			
	LD LDY LDN	Light Weight Display = YES = NO			
	CLC:Yes	Clear cache: Yes			
	CLC:No	Clear cache: NO			
	PPAV4	Solution/ Aplication PLMPerformacneAnalye			

← In Work J.Fes / 01.11.2024 →