CineSat Server Specification V4.82

Hardware

The following CineSat Servers can be ordered based on the technical specifications below:

CS EUMETCast Tower Server

CS-SV-EMC-T
Typical processing server for satellite data retrieved from a separate EUMETCast receiver

CS EUMETCast Rack Server

CS-SV-EMC-R
Typical processing server for satellite data retrieved from a separate EUMETCast receiver

The necessary server and network resources strongly depend on

- number and type of configured data sources,
- geographical area and resolution of configured weather products,
- real-time requirements,
- number of connected CineSat clients

Please ask us for a customized offer.

For large scale EUMETCast processing we recommend the following server platform:

CineSat Server	CS-SV-EMC
Architecture:	x64 (64-bit hardware), with virtualization support
Processor:	fast 2 x 10/12 Core (20/24 cores) with hyper-threading (~40/48 cores)
RAM:	64 GB
Disks:	2×500 GB RAID1 + 4×500 GB RAID5, 15000 rpm
Network:	2 x Gbit RJ-45
Chassis:	Rack or Tower; specify with order
Graphics:	1280×1024
Monitor:	no monitor
Media:	CD R/W, DVD-R
Keyboard:	specify language with order
Mouse:	2-button scrollwheel
Support:	5 years next business day on-site

Software

CineSat V4.82 has been validated for CentOS 8 / RedHat Enterprise Linux 8.

CineSat Server - Software	
Operating System:	RedHat Enterprise Linux 8, version 8.3 or higher
OS Architecture:	x86_64 (64-bit architecture)
OS Updates:	5 years RHN update subscription
Java:	Java Runtime Environment OpenJDK 8 for 64-bit (1.8.0_275 or higher recommended)
Movies:	mplayer/mencoder V1.1 or higher
PDF:	PDF reader (Adobe Acrobat recommended)
File Sharing:	NFS, Samba 4.x (to support Windows Active Directory integration)
GUI:	X-windows based graphical user interface, e.g. GNOME
Web Server:	Apache web server configured to browse CineSat's HTML result site
Browser:	JavaScript enabled web browser (Firefox)
Compiler:	ANSI C-compiler, linker, make
Optional:	standard image conversion programs (e.g. ImageMagick)
For future use:	PHP 7.2 or higher
EUMETCast:	xRITDecompress - EUMETSAT license and software for Wavelet Decompression

CineSat Platforms

CentOS replaced by Rocky Linux

After the early death of CentOS 8 in December 2021, CineSat supports its successor Rocky Linux 8.
Rocky Linux 8 is built from stable RedHat Enterprise Linux releases, 100% compatible, and supported until 2029.

⮕ Early death of CentOS: CineSat released for Rocky Linux 8.4

	Platform	OS Version	CPU Architecture	Java/JDK Release	CS Versions & Comments
⭐	Rocky Linux / Red Hat Enterprise Linux	8.6	x64 (64-bit)	OpenJDK 8 (64-bit)	⭐ Recommended for new systems CS use V4.84+ released in Q3, 2022
🔴	CentOS / Red Hat Enterprise Linux	7.1 - 7.7	x64 (64-bit)	Oracle Java 8 (64-bit), OpenJDK 8 (64-bit)	CS no RHEL 7 installations left; all user systems upgraded to 8.x
🔴	Red Hat Enterprise Linux	6.x	x64 (64-bit)	Oracle Java 8 (64-bit)	deprecated, but still operational, CS Extended Lifecycle Support License
🔴	Red Hat Enterprise Linux	5.5+	x64 (64-bit)	Oracle Java 8 (64-bit)	deprecated, but still operational, CS Extended Lifecycle Support License
🔴	Red Hat Enterprise Linux	5.x	x86 (32-bit)	Oracle Java 6 (32-bit)	deprecated, but still operational, CS Extended Lifecycle Support License
🔴	Red Hat Enterprise Linux	4.x	x86 (32-bit)	Sun Java 4, 5 Oracle Java 6 (32-bit)	deprecated, but still operational, CS Extended Lifecycle Support License
🔴	Red Hat Enterprise Linux	3.x	x86 (32-bit)	Sun Java 4, 5 Oracle Java 6 (32-bit)	deprecated, but still operational, CS Extended Lifecycle Support License

🔴 RedHat has dropped support for RHEL 3-7.
⮕ Please upgrade to latest platforms.
⮕ RedHat Lifecycle

Compatibility Issues

Java ...
The Java installation is local to the CineSat software and therefore independent from the Java machine that comes bundled with the operating system, i.e. CineSat can safely run with a local Java 8 installation even when the operating system comes with other Java versions.

MPlayer ...
MPlayer versions lower than V1.1 do not run stable or even not at all on various RedHat 5.x releases. Therefore, only MPlayer 1.1 or higher is being supported.

CineSat Server Configuration Services

- Bare metal RHEL 8 / CentOS 8 installation
- Check and install of necessary OS libraries
- RHN registration and OS update
- CineSat installation (current release)
- Installation of recommended 3rd party tools
- Pre-configuration of standard CineSat users
- Installation test (FAT)
- Optional: Site Acceptance Test (SAT)

All configuration services are only available in combination with hardware purchase.