



Ekran System v.6.23

System Requirements

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System Requirements

Ekran System claims different system requirements for each of its components. Make sure your hardware and software meet the following system requirements to avoid possible component malfunctions.

Software Requirements

Server requirements

- Windows Server 2019, Windows Server 2016, Windows Server 2012, and Windows Server 2008 R2 (x64 platform)
- Universal C Runtime and Visual C++ Runtime (starting with Ekran System 5.5). Both can be installed via the Microsoft Visual C++ 2015 Redistributable: <https://www.microsoft.com/en-gb/download/details.aspx?id=48145>

NOTE: The Universal C Runtime needs to be initially installed via update KB2999226:
<https://support.microsoft.com/en-us/help/2999226/update-for-universal-c-runtime-in-windows>

- .Net Framework 4.8
NOTE: If the Server and the Management Tool are to be installed on the same computer, make sure you turn on the Internet Information Service before the installation of .Net Framework 4.8.
- Starting with a medium deployment, it is recommended to deploy Ekran System in the High Availability mode using Microsoft Failover Cluster

Database requirements

- [When using MS SQL Database]: Full edition of MS SQL Server 2019, MS SQL Server 2017, MS SQL Server 2016, MS SQL Server 2014, MS SQL Server 2012, MS SQL Server 2008R2. Standard license or higher is required
- [When using PostgreSQL Database]: PostgreSQL 10 or higher
- Microsoft Azure SQL Database
- Windows Server 2019, Windows Server 2016, Windows Server 2012, and Windows Server 2008 R2 (x64 platform)
- It is recommended to have enough free space depending on the volume and frequency of monitoring and the retention period of the Client monitoring data (on average, 1 Workstation Client generates 150 MB per 8-hour working day)
- Starting with a medium deployment, it is recommended to store binary data in a shared or local folder
- Starting with a medium deployment, it is highly recommended to configure the SQL Server failover cluster

Management Tool requirements

- Windows 10, Windows 8.1, Windows 8, Windows 7 (any edition except Home); **[recommended]** Windows Server 2019, Windows Server 2016, Windows Server 2012, and Windows Server 2008 R2 (starting from SP1 version). Both x86 and x64 platforms are supported
 - .Net Framework 4.8
 - IIS 7.5 or higher with enabled ASP.NET 3.5 and 4.5 support (4.6 for Windows Server 2016)
 - [For accessing the Management Tool locally or remotely] One of the following browsers:
 - Google Chrome 37 or higher
 - Mozilla Firefox 32 or higher
 - Internet Explorer 10 or higher
 - Safari S6
 - Opera 15 or higher
- NOTE: The Management Tool might be opened in other browsers, but its compatibility with other browsers is not guaranteed.**
- Starting with a medium deployment, it is recommended to install Management Tool on a separate computer

Hardware Requirements

Small Deployments (Up to 200 simultaneous sessions)

Server

- CPU: 4-8 Cores
- RAM: 8-16 Gb

Database

- CPU: 4-8 Cores
- RAM: 16 GB

Bandwidth

- 1 GB Ethernet (10 GB Ethernet is recommended)

Management Tool

- CPU: 4-8 Cores
- RAM: 4GB
- 1 GB Ethernet

Medium Deployment (Up to 1000 simultaneous sessions)

Server

- CPU: 8-16 Cores
- RAM: 8-16 Gb
- It is recommended to deploy Ekran System in the High Availability mode using Microsoft Failover Cluster

Database

- CPU: 8-16 Cores
- RAM: 24-32 GB
- It is recommended to store binary data in a shared or local folder
- [When binary data is stored in a shared or local folder] Operating System hard disk: 100-200 GB (15K or SSD)
- It is highly recommended to configure the SQL Server failover cluster

Bandwidth

- 1 GB Ethernet (10 GB Ethernet is recommended)

Management Tool

- CPU: 4-8 Cores
- RAM: 4GB
- 1 GB Ethernet
- It is recommended to install Management Tool on a separate computer

Large Deployment (Up to 10 000 simultaneous sessions)

Server

- CPU: 16-32 Cores
- RAM: 8-16 Gb
- It is recommended to deploy Ekran System in the High Availability mode using Microsoft Failover Cluster

Database

- CPU: 16-32 Cores
- RAM: 64-128 GB
- It is recommended to store binary data in a shared or local folder
- [When binary data is stored in a shared or local folder] Operating System hard disk: 100-200 GB (15K or SSD)

- It is highly recommended to configure the SQL Server failover cluster

Bandwidth

- 1 GB Ethernet (10 GB Ethernet is recommended)

Management Tool

- CPU: 4-8 Cores
- RAM: 4GB
- 1 GB Ethernet
- It is recommended to install Management Tool on a separate computer

Client Requirements

Client as Terminal Server requirements

- Processor: Intel i3 or higher or equivalent AMD processor
- RAM: 2 GB or more (35 MB per session)
- 100 Mb/1Gb Ethernet adapter

NOTE: Hardware requirements depend on the number of active user sessions and may increase drastically.

Windows Client requirements

- 2.4 GHz or higher CPU is recommended
- RAM: 4GB
- 100 Mb/1Gb Ethernet adapter
- Windows 10, Windows 8.1, Windows 8, Windows 7, Windows Vista, Windows XP SP3; Windows Server 2019, Windows Server 2016, Windows Server 2012, Windows Server 2008, and Windows Server 2003 SP1. Both x86 and x64 platforms are supported

NOTE: Due to the new SHA-256 code signing, on Windows 7 SP1 and Windows Server 2008 R2 SP1, the Microsoft Security Advisory update 3033929 needs to be installed:

<https://docs.microsoft.com/en-us/security-updates/SecurityAdvisories/2015/3033929>

- Citrix XenDesktop; Citrix XenApp; Citrix XenDesktop/XenApp with Citrix Provisioning Services (PVS)
- It is recommended to have not less than 1 GB of free space on the disk where the Client is installed to save data during the offline session

Linux Client requirements (Terminal)

- 2.4 GHz or higher CPU is recommended
- RAM: 4GB
- 100 Mb/1Gb Ethernet adapter
- It is recommended to have not less than 1 GB of free space on the disk where the Client is installed to save data during the offline session
- Linux Kernel 2.6.32 and higher

Distributor Base	OS	Versions Supported
Debian	Debian Ubuntu	9.0, 8.0, 7.0 20.04, 18.04, 16.04, 14.04
openSUSE	Suse Linux Enterprise Server	12(SP1, SP2, SP3), 11(SP2, SP3, SP4)
RedHat	RedHat CentOS Oracle Linux	7.0, 6.0 7.x , 6.x 7.x - 5.6
Sun Microsystems	Solaris	11.0, 10.0 (Global and Whole root zones only)
IBM	AIX	7.2, 7.1

Linux Client requirements (monitoring of graphical interface for X Window System)

- 2.4 GHz or higher CPU is recommended
- RAM: 4GB
- 100 Mb/1Gb Ethernet adapter
- It is recommended to have not less than 1 GB of free space on the disk where the Client is installed to save data during the offline session
- Linux Kernel 2.6.32 and higher

OS	Versions Supported
Ubuntu	Ubuntu 20.04 LTS, Ubuntu 18.04.1 LTS, Ubuntu 16.04.5 LTS, Ubuntu 16.04.2, Ubuntu 14.04.5 LTS, Ubuntu 14.04.2, Ubuntu 12.04.1, Ubuntu 14.04 LTS
Red Hat	Red Hat 7.0 – 7.6, Red Hat 6.0 – 6.10
CentOS	CentOS 7.1 – 7.5, CentOS 6.1 – 6.9

Suse Linux Enterprise Server	12(SP1, SP2, SP3)
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macOS Client requirements

- 2.26GHz Intel Core 2 Duo or higher CPU
- 2GB RAM
- 100 Mbit/s network link
- macOS 10.9 and later
- It is recommended to have not less than 1 GB of free space on the disk where the Client is installed to save data during the offline session

Client Performance Numbers

Parameter	Value
Average CPU load for 1 working hour	0.5% per session
Peak CPU load	Up to 5% in one session
Bandwidth requirements	128 Kbit/s
Average Data Volume	1 average workstation agent generates 150 MB per 8h working day
Peak Data Volume	1 workstation agent can generate up to 15 – 25 MB per intensive working hour
Data Volume (for Windows Clients)	
1 session per 1 day (average)	150 MB
1 session per 1 day (maximum)	5136 MB (at the best screenshot quality)
100 sessions per 1 day (average)	15 GB
Data Volume (for Linux Clients)	
1 session per 15 minutes (average)	8 MB
1 session per 1 day (average)	100 MB

NOTE: Performance numbers have been measured for one session with Full HD display resolution and default screen-capture and color settings.

For Linux Clients, Ekran System allows reducing the amount of information received from the Clients by defining separate commands which output will be skipped during the monitoring.