ASTRA LINUX®

Astra Linux

Secure operating system

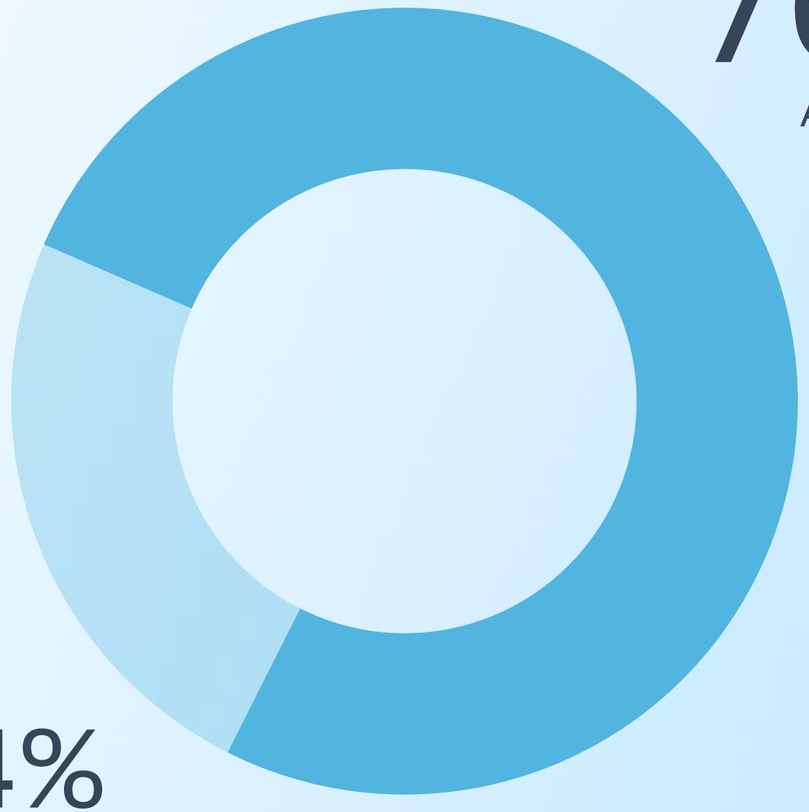
Operating system

Astra Linux is a secure operating system developed by Astra Group

It is the flagship product of the company’s technological ecosystem that includes more than 35 software solutions and services to build a secure, stable, and manageable foundation of any corporate digital infrastructure

Launched in 2008, it is designed for desktop, server, mobile, and embedded environments

Astra Linux in Russia



76%

Astra Linux

24%

Other solutions

Astra Linux

Desktop

Designed to create workstations suitable for everyday office and multimedia tasks

Astra Proxima interface concept

Continuity and familiar user experience

Lightweight and clean design

Continuous development with user feedback

Versatility

Multimedia and office software in the base package

Compatibility

Support for a wide range of third-party software and hardware

Astra Linux

Server

Optimized for high workloads, designed for the server side of IT infrastructure

Security and Reliability

Built-in security technologies and event logging capabilities
Secure virtualization and containerization stack
Secure Database Management System

Compatibility and versatility

Supports servers based on multiple processor architectures, including s390x
Broad compatibility with server software

Functionality and scalability

Domain infrastructure management
High availability and clustering tools
30+ deployment scenarios

Services and integrations

Tools for application development and deployment
Library of virtual machine images and container images for a wide range of virtualization and containerization platforms
Technical support for server components

Astra Linux

Mobile

Designed for tablets and other mobile devices, enabling secure remote work for employees within a protected corporate IT perimeter

Security

Built-in information security tools are the same as those in other editions of Astra Linux

Convenience

Connecting a mouse, keyboard, and monitor allows you to work as you would on a regular computer

Interface

Adapted for touchscreens of tablets with small screen diagonals

Manageability

A fleet of devices running Astra Linux Mobile can be centrally administered using ALD Pro

Flexibility

Ability to install and run Android apps

Astra Linux

Embedded

Embedded OS edition for specialized devices

Specialized devices – physical hardware designed to perform specific tasks as defined by the manufacturer during during design and development

Compatibility

Support for major processor architectures and popular hardware components

Security

Integrated information security tools, enabling the OS to be used in building trusted solutions

Individual approach

Custom solutions tailored to specific device models

Information security

Built-in information security tools for unauthorized access protection enable data processing at any confidentiality level without add-on information security tools

Standard OS information security tools

- Discretionary access control
- Security event logging
- Control over connected removable media
- Kiosk mode with applications whitelist

Enhanced protection

- Discretionary access control
- Security event logging
- Control over connected removable media
- Kiosk mode with applications whitelist

Infrastructure security tools

- Protection mechanisms for DBMS and virtualization tools
- Secure environment for container virtualization

- Personal data
- Trade secrets
- Classified information:
  - Confidential
  - Secret
  - Top secret
- Other confidential information

Closed software environment

The system verifies a trusted signing certificate before allowing programs to run

If checksums match, the system grants the user permission to run the application

Administrators can add and revoke trusted certificates

CSE: Running trusted application software only

- Blocks untrusted software from running
- Protects against application spoofing
- Simplifies application administration

Mandatory integrity control

01 The operating system is segmented using integrity labels – compromising one subsystem will not compromise the operation of others

02 In Astra Linux security levels Voronezh and Smolensk, recommended MIC settings are implemented. The system administrator can change these settings as needed

03 In the Astra Linux OS, the root superuser operates with the minimum integrity label by default. Compromising the root account will not grant attackers full control over the system

MIC: protecting the OS from intrusion and unauthorized modification

- Significantly reduces the attack surface
- Protects against the injection and exploitation of malicious code or components
- Blocks unauthorized privilege escalation
- Prevents concealment of attacker activity within the system
- Restricts unauthorized access or impact on the system
- Reduces risks of human error

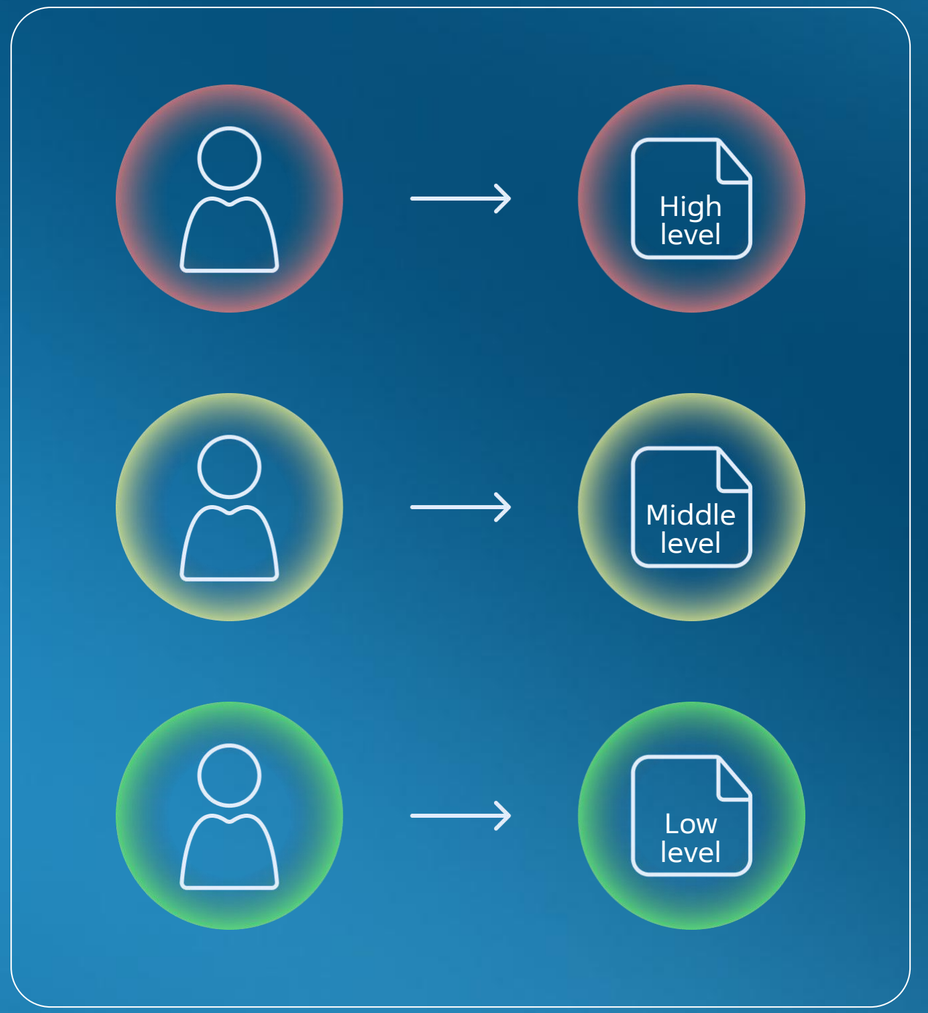
Mandatory access control

Protection of confidential information from leakage

01 MAC provides secure “sandboxes” for working with confidential information

02 The information security administrator assigns labels and categories to users and documents, which determine the access level to confidential information

03 Users cannot interact with files at a higher access level: reading, modifying, deleting, moving, sending, or copying content is blocked



Security levels

The OS security level for each element of an information system is chosen based on relevant security threats. Each security level corresponds to an equivalent licensing option

Proprietary information security tools	Basic Orel	Enhanced Voronezh	Maximum Smolensk
Discretionary access control (single confidentiality level), control over installed software, and security event auditing	+	+	+
Closed software environment (CSE) allows only trusted software to run		+	+
Mandatory Integrity Control (MIC) protects critical information and system components from unauthorized changes, including against zero-day threats		+	+
Mandatory Access Control (MAC) – user rights control to read and modify documents based on data confidentiality levels and information categories			+

Ready for Astra

Partner ecosystem

Technology partnership program with hardware manufacturers and software developers

1250+
compatibility-certified
software products

2050+
compatibility-certified
hardware models

Ecosystem
of compatible technologies:
a range of tools for any task

Benefits with Astra Linux

- Significant experience in implementing solutions in various industries
- Comprehensive information security system
- Automation of installation, configuration, and updates
- Compatibility with a wide range of hardware and software

ASTRA LINUX®

Contact us to discuss the project

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