

COMPARISON OF WEB AND DESKTOP APPLICATIONS IN IT INFRASTRUCTURE MANAGEMENT

Using the example of the eAuditor system and competitive solutions

| Web application (eAuditor) | Desktop application (other solutions) |
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| no need for installation on the device the user accesses the application through a specific URL | requires installation on the device the system must be installed on each administrative computer |
| hardware and software platform independence | full dependence on hardware and software platforms |
| continuous access to the application from any mobile device in practice, it's even possible to use a mobile phone | required support for a specific operating system |
| high data security data is stored on the server, and access to it occurs through a web server | greater susceptibility to data leaks/theft in practice, desktop applications have full access to all data |
| no need to update the administrative console on the administrator's computer updates occur on the server-side through the web server | required support for multiple operating systems updates require installation on each workstation with the administrative console |
| high data processing and presentation speed data is saved and processed on fast servers; data transmission only involves selected portions of data | dependency on the administrator's computer performance system scalability has significant limitations due to placing the application logic within the application itself on the administrative computer |
| high system scalability web applications have high scalability capabilities on the server side | limited system scalability web applications have high scalability capabilities on the server side |
| no need for administrator privileges to run the application the application is not installed on the administrator's computer | requirement for administrator privileges administrator privileges are required for the installation of the system, which is necessary for later application execution |
| minimal resource allocation (RAM, processor) on the administrator's computer all data processing operations occur on the server side | high resource allocation resource allocation depends on the amount of transmitted data, data processing methods, and the complexity of the processing |
| does not require updates on the administrator's computer side | requires updates on the administrator's computer the update process requires administrative rights |
| no service costs there are no service costs on the administrator's computer side—no costs for updates, upgrades, fixes, etc | high service costs the need for installation, updates, upgrades, fixes, and uninstallation contributes to high service costs |
| greater user impact on security | security more dependent on the application's manufacturer |
| high stability web applications are resistant to system compatibility errors, and the number of application errors is significantly lower | high sensitivity to installed libraries and other systems desktop applications are fully dependent on the operating system, version, installed updates, and other applications |
| ability to migrate the system to the cloud web applications can function correctly in both private and public clouds | no possibility of migration to the cloud desktop applications are not designed to operate in private or public clouds |
| low data transfers web applications process data on the server side, and the workstation receives a formatted HTML page | high data transfers in most cases, desktop applications have implemented logic, and data processing occurs on their side |