Product overview

OpenText™

Exceed™ TurboX

Delivers cost savings, high definition display and supercharged sharing

Organizations are looking to consolidate data centers to reduce overall IT spending and increase central manageability. At the same time, IT departments need to provide high performance, remote access to users of graphically demanding software on Linux®, Unix® and Microsoft® Windows®. This is the kind of software many organizations use to design their core products, such as semiconductors, engine parts, architecture or any other graphically demanding design and construction software.

OpenText Exceed TurboX is an advanced solution for desktop virtualization and remote access to graphically demanding applications such as CAD, EDA and many others, including X Window applications hosted on UNIX and Linux servers and Windows applications hosted on Windows servers. Exceed TurboX provides high performance over long-distance and low-bandwidth data connections. Exceed TurboX provides a central location for IT to securely deploy applications running on a variety of server platforms to a managed list of users. As a result, Exceed TurboX enables organizations to save costs by consolidating applications into a single or very few global data centers with minimal disruption to the business.

- Exceptional performance
- Remote access for 2D and 3D graphical applications
- Powerful collaboration for global teams
- Advanced security and central management
- Remote access from Microsoft® Windows®, Mac®, Linux® or iPad®
Exceptional performance remote access for 2D and 3D graphical applications

Exceed TurboX offers extremely efficient bandwidth usage for WAN access. The high performance enables a global workforce to work out of a central data center. Remote workers can use their graphically demanding software solutions with LAN-like performance. Exceed TurboX performance is so good that many organizations have consolidated their multiple data centers into one single global data center. Exceed TurboX ensures high performance from anywhere in the world.

Powerful collaboration for global teams

Uncomplicated collaboration between employees and external partners increases productivity. Exceed TurboX provides supercharged screen sharing, including the ability to pass control to remote users to enable a highly productive global workforce.

Advanced security

Exceed TurboX provides high security on many levels to protect intellectual property from internal and external attacks. Keeping core product design applications in a central data center ensures there is no physical unauthorized access. Exceed TurboX prevents copying remote data and copying data to the clipboard. Strong encryption is used for the data traffic between the client browser and the ETX web server, as well for the screen content stream between a node and the client.

Remote access from Windows, Mac®, Linux or iPad®

Users have many platform choices for remote access to their graphically demanding solutions. Exceed TurboX can be used on Windows, Mac, Linux or iPad. These platforms are significantly more cost-effective than giving high-end graphics Linux/Unix workstations to every user.

Exceed TurboX excels when it comes to performance over WAN, giving remote users local-like performance. High performance enables data center consolidation, which saves costs and the security features of Exceed TurboX ensure IP is always protected. Organizations all over the world use Exceed TurboX because it is highly reliable and preserves sessions over client disconnects.
<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
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<tr>
<td><strong>High definition display</strong></td>
<td>• Offers unrivaled pixel-perfect drawing and precise color rendering, which increases productivity and quality of work</td>
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<td><strong>Adaptive remote protocols</strong></td>
<td>• Tuned itself automatically to deliver the perfect balance between image fidelity and accuracy, along with optimal performance and bandwidth usage</td>
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<td><strong>Ultra-low bandwidth usage</strong></td>
<td>• Reduces bandwidth requirements dramatically when accessing remote desktops and applications over the WAN, while providing the best possible responsiveness and display quality</td>
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<td><strong>Built-in support for OpenGL and DirectX</strong></td>
<td>• Delivers out-of-the-box support for GPU-accelerated OpenGL and DirectX remote sessions for Windows and X Window applications for CAD/CAM engineers and other professionals working on 3D modeling</td>
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<td>• Allows users to access their remote 3D applications, suspend their session and restart it later</td>
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<td><strong>Support for 64-bit</strong></td>
<td>• Natively supports the 64-bit architecture on all platforms (both the server and client components)</td>
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<td><strong>Centralized web access</strong></td>
<td>• Provides users with a web dashboard to access their remote desktops and applications</td>
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<td>• Enables users to create, customize and launch sessions from a single location, with IT deciding which systems are accessible based on user ID or group</td>
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<td><strong>Suspend and resume</strong></td>
<td>• Allows users to take Windows and X Window sessions with them when they are on the go—suspending any active sessions and resuming them anytime, anywhere, on any platform.</td>
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<td><strong>Session Sneak Peek</strong></td>
<td>• Enables users to check the status of a session or simulation without resuming the session, viewing a snapshot in real time, from any device.</td>
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<td><strong>Fail-proof sessions</strong></td>
<td>• Suspends any active session automatically if a network connection is lost</td>
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<td>• Maintains the state of applications running in the session, protecting valuable project data from accidental disconnection</td>
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<td><strong>Supercharged sharing</strong></td>
<td>• Allows users from around the globe to share projects and ideas in real time over the internet, by taking advantage of desktop and application sharing for both Windows and X Window sessions</td>
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<td><strong>All-in-one remote access</strong></td>
<td>• Provides fast remote access to UNIX, Linux and Windows desktops from any Windows, Mac, Linux PC or iPad</td>
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<td>• Allows users to work on the platform of their choice, while accessing applications and desktops on a variety of hosts</td>
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<td><strong>Messages and notifications</strong></td>
<td>• Includes a built-in email messaging system that notifies users based on predefined events, such as system or session status or when someone wants to share a session</td>
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<td>• Improves the responsiveness of IT and enhances user productivity with real-time notifications</td>
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<td><strong>Support FIPS 140-2 validated encryption</strong></td>
<td>• Incorporates the latest FIPS 140-2 enabled SSL libraries to encrypt network communication</td>
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<td><strong>Encryption with SSH and SSL</strong></td>
<td>• Offers a combination of Secure Shell (SSH) and Secure Socket Layer (SSL) protocols to secure and encrypt communication between user desktop computers and application hosts</td>
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<td><strong>Single-sign-on and LDAP integration</strong></td>
<td>• Grants Windows users access to Exceed TurboX and remote resources without re-authentication through the support for Kerberos™ and GSSAPI</td>
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<td>• Reduces password fatigue with single-sign-on and helps organizations improve compliance</td>
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<td>• Supports various back-end authentication mechanisms, including Pluggable Authentication Modules (PAM), through which users can be authenticated against third-party authentication systems that have standards-based PAM libraries</td>
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<td><strong>Comprehensive activity log</strong></td>
<td>• Empowers administrators with the ability to quickly explore and inspect details of user and server activities through the intuitive web UI</td>
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<td>• Enables users to easily export log entries for further analysis or archiving purposes</td>
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<td><strong>Clustering and load balancing</strong></td>
<td>• Supports horizontal scaling of line-of-business applications and their demand for computing resources</td>
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<td>• Distributes workloads dynamically within the cluster to ensure that all server resources are fully utilized</td>
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<td><strong>Multiple levels of failover and redundancy</strong></td>
<td>• Offers automatic fail-over protection and works with existing high-availability infrastructures to support various failover scenarios and redundancy provisioning</td>
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<td><strong>Centralized users and access management</strong></td>
<td>• Keeps users and access management in a centralized database</td>
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<td>• Decreases the administrative headaches of managing disparate user communities and empowers administrators to control application access on the user and group levels</td>
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<td><strong>Automatic upgrades</strong></td>
<td>• Reduces the cost of upgrades by automatically rolling out ETX server-side components to all server nodes when the latest version is installed</td>
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<td>• Applies most upgrades without interrupting user sessions and runtime patches can be applied selectively to test new functionality without affecting other users</td>
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## Feature

### Remote support
- Uses centralized data storage to store system and user-related profiles and configurations, reducing the administrative headaches of managing disparate user desktops
- Empowers administrators to manage application access at the user and group levels using centralized profile management

### Zero client installation
- Eliminates the stress on IT by providing a clientless architecture, where the latest client runtime is downloaded from the ETX server on demand

### Rest API support
- Supports management of the ETX server via REST API, enabling management of the ETX server through custom applications and shell scripts, reducing the administrative burden of managing complex infrastructure
- Allows ETX functionality to be embedded into existing applications and web portals, for example, to launch remote sessions

### Diverse administrative roles
- Supports four different administrative levels, each crafted for different management tasks

### Anywhere administration
- Empowers administrators to monitor and manage Exceed TurboX from any location using just a web browser on any computing device
- Includes a full web interface

### User and group Management with Microsoft® Active Directory® integration
- Non-intrusively accesses Microsoft Active Directory and allows administrators to import and use existing user and group information to configure profile and access control

### Built-in reporting
- Provides detailed reporting on resource and license usage over any given period of time, providing insights into usage patterns and license consumption, so that companies can properly provision hardware and software licenses, as well as track usage by user group

### GPU H.264 support for maximum infrastructure consolidation
- Supports GPU-enabled virtual machines, providing extreme scalability for high-end 2D and 3D user environments and the Exceed TurboX proxy takes advantage of NVIDIA GRID technology to offload work from the CPU to the GPU
- Allows IT to consolidate its engineering and designers into virtual data centers for efficient virtualization

### Designed for private/public cloud
- Employs a modern, web-centric architecture with web-based authentication and administration interfaces

### Web application server
- Red Hat® Enterprise Linux® 6.5 or later, 64-bit
- Oracle® Solaris® SPARC® 10 & 11, 64-bit
- Oracle Solaris x86-64 10 & 11, 64-bit

### Database server
- IBM® DB2® Express-C 10.5 with Red Hat Enterprise Linux 6 or later, 64-bit only
- IBM DB2 Enterprise Server 10.5 with Red Hat Enterprise Linux 6 or later, 64-bit only
- Microsoft® SQL® 2012 SP1 Standard Edition or later on Windows Server 2012 R2 or later
- Microsoft SQL 2008 R2 SP2 Standard Edition or later on Windows Server 2008 R2 SP1 or later
- Apache® Derby™ 10 or later, on all supported ETX Server platforms

### Connection node
- Oracle Solaris SPARC 10 & 11, 64-bit
- Oracle Solaris x86-64 10 & 11, 64-bit
- Red Hat Enterprise Linux 6.5 or later, 64-bit
- SuSE® Linux Enterprise 11 & 12, 64-bit
- IBM AIX® 6.1 or 7.1
- Windows 10, 64-bit
- Windows 8.1, 64-bit
- Windows 7 SP1, 64-bit
- Windows Server® 2008 R2 SP1, 64-bit
- Windows Server 2012 R2

### Client platforms
- Windows 10
- Windows 8.1
- Windows 7 SP1 or later
- Windows Server 2008 R2 SP1 or later
- Windows Server 2012 R2 or later
- Red Hat Enterprise Linux 6.5 or later, 64-bit
- SuSE Linux Enterprise Linux 11 & 12, 64-bit
- Mac OS X 10.11 (El Capitan)
- iOS 9.0 or later, on iPad 2 or later, iPad Air®, iPad Air 2, iPad mini™ 2 or later, iPad Pro®
- Java 8 Update 100 or later

### Web browsers
- Microsoft Internet Explorer® 11
- Microsoft Edge®
- Mozilla Firefox®
- Google Chrome™
- Safari® 8 or later (applicable to Mac OS X only)
The administrator view on nodes and sessions, including a live check on the current status of a selected session.

Internet connection (e.g. to a data center) can be SSL encrypted.

ETX connection nodes (session proxies) provide remote access to graphically demanding software on high-end Linux, UNIX and Windows servers from many platforms.

ETX Server Web Interface (Linux or Windows)