

OpenText Exceed TurboX 12

Delivers high performance, cost savings, high-definition display, supercharged sharing and high availability



Faster web interface and included internal data store



High availability reduces outage risks



Easy installation, configuration, improved administration and seamless migration from OpenText™ Exceed™ TurboX 11.5

As many organizations look to consolidate data centers to reduce IT spending and increase central manageability, they also need to provide high performance, remote access to users of graphically demanding software on Linux®, Unix® and Microsoft® Windows®. This type of software, as well as other graphically demanding design and construction software, is what many organizations use to design their core products, such as semiconductors, engine parts or architecture. Organizations are looking for solutions that cover graphically demanding and standard business user desktops to enable the benefits of virtualization.

The latest version of OpenText™ Exceed™ TurboX 12 includes an internal data store, adds easy-to-configure high availability (HA), eliminating single points of failure with redundant systems and providing reliable crossover in case of a failure. Exceed TurboX 12 provides easier installation and configuration, including a seamless upgrade from ETX 11.5 and higher granularity in configuring IP protection.

Exceed TurboX (ETX) 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. It provides a central location for IT to securely deploy applications running on a variety of server platforms to a managed list of users, reducing costs by consolidating applications into a single, or very few, global data centers with minimal disruption to the business.

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. 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.

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.

Global productivity and collaboration

As 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.

Simplified architecture

Exceed TurboX 12 eliminates the need to install and manage an external database. The new internal data store eliminates a wide variety of administration tasks, such as database hosting, scheduled backups and database replication. In version 12, ETX Server now uses an internal lightweight data store, with binary files (such as runtimes) stored directly on the file system. The Tomcat web server from prior releases has also been eliminated and replaced by Eclipse Jetty, an internal web server that provides better efficiency and tighter security.

Integrated High Availability

Exceed TurboX 12 servers can now be deployed in a highly available server "cluster," providing high availability access to ETX Server with maximum uptime. Each server in the HA cluster is active, so that sessions can be distributed to each ETX Server in the cluster by means of a front-end web load balancer. This new HA model follows enterprise best practices for high availability web servers and replaces the "failover" model from previous versions that required enterprise database replication and only supported a single "master" server. In the cluster model, data is synchronized automatically between ETX servers, so that a failed ETX server can be brought back online later without data corruption or data synchronization issues.

Easier administration

The installation process for the ETX Server has been simplified into two steps: Extract the files and start the server. Configuration can be fully automated from the command line and REST APIs, but can also be completed entirely through the ETX Server manager (web console). New messages have been added to notify server administrators of problems, such as low disk space or the inability to reach the license server or other servers in the HA cluster.

SMS group improves staff productivity with OpenText

SMS group GmbH (SMS) is a German, family-owned business founded in 1871, with approximately 13,500 employees and annual revenues of €3.5 billion. As a leading, global partner for the metal industry, SMS focuses on quality and innovation, striving to add value worldwide.

SMS group deployed OpenText™ Exceed™ TurboX to give its engineers and knowledge workers global access to centralized graphical software for complex calculations and graphical simulations running on UNIX® servers in a data center.

“OpenText Exceed TurboX provides us with a cost-saving and reliable solution, that simply works.”

Dr. -Ing. Christian Imiela

Manager, Calculations and Structure Analyses
SMS group

[Read the Success story](#)

Seamless upgrades

Upgrading from ETX version 11.5 to version 12 is easy with an automated migration procedure built into version 12. This will automatically migrate existing users and database (including DB2, MSSQL or Derby) to version 12 without losing any data from the existing environment. This process is automatic and does not require much effort on behalf of the ETX administrator.

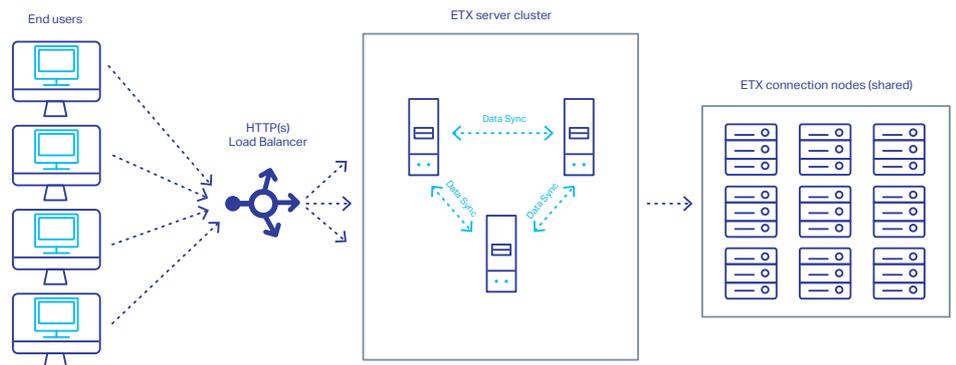
All existing configuration settings will be automatically imported into the new ETX 12 configuration and all required version 12 updates will be done automatically. This is required to support the new properties and changes introduced with ETX 12 high availability server clusters and other new features. For administrators, this is a seamless process, not requiring manual work.

Enhanced IP protection

ETX supports organizations to protect their IP in a locked down data center. Systems can be configured so that internal and external users are unable to print locally, transfer files from the server or copy content to the local clipboard. With ETX 12, clipboard interactions can be restricted or allowed in both node to client and client to node modes. Printing and file transfer can now be configured sitewide or per profile, giving administrators more granular ways of protecting IP without restricting usability.

Organizations all over the world use Exceed TurboX for its reliability and ability to preserve sessions over client disconnects. 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, while the security features of Exceed TurboX ensure IP is always protected.

ETX 12 high availability



Features

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|--|---|
| High definition display | <ul style="list-style-type: none">• Offers unrivaled pixel-perfect drawing and precise color rendering, important for visual designers, CAD engineers, doctors and other users who require high-accuracy display |
| Adaptive remote protocols | <ul style="list-style-type: none">• Tunes itself automatically to deliver the perfect balance between image fidelity and accuracy, along with optimal performance and bandwidth usage |
| Ultra-low bandwidth usage | <ul style="list-style-type: none">• Reduces bandwidth requirements dramatically when accessing remote desktops and applications over the WAN, while providing the best possible responsiveness and display quality |
| Built-in support for OpenGL and DirectX | <ul style="list-style-type: none">• 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• Allows users to access their remote 3D applications, suspend their session and restart it later |

Session Management

- | | |
|-----------------------------------|--|
| Centralized web access | <ul style="list-style-type: none">• Provides users with a web dashboard to access their remote desktops and applications• 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 |
| Suspend and resume | <ul style="list-style-type: none">• 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 |
| Session Sneak Peek | <ul style="list-style-type: none">• Enables users to check the status of a session or simulation without resuming the session, viewing a snapshot in realtime, from any device. |
| Fail-proof sessions | <ul style="list-style-type: none">• Suspends any active session automatically if a network connection is lost• Maintains the state of applications running in the session, protecting valuable project data from accidental disconnection |
| Supercharged sharing | <ul style="list-style-type: none">• Allows users from around the globe to share projects and ideas in realtime over the internet, by taking advantage of desktop and application sharing for both Windows and X Window sessions |
| All-in-one remote access | <ul style="list-style-type: none">• Provides fast remote access to UNIX, Linux and Windows desktops from any Windows, Mac, Linux PC or iPad• Allows users to work on the platform of their choice, while accessing applications and desktops on a variety of hosts• Sessions can be transferred between clients on different operating systems |
| Messages and notifications | <ul style="list-style-type: none">• 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• Improves the responsiveness of IT and enhances user productivity with realtime notifications |

Security and authentication

Supports FIPS 140-2 validated encryption

- Incorporates the latest FIPS 140-2 enabled SSL libraries to encrypt network communication

Encryption with SSH and SSL

- 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

Single-sign-on and LDAP integration

- Grants Windows users access to Exceed TurboX and remote resources without re-authentication through the support for Kerberos™ and GSSAPI
- Reduces password fatigue with single-sign-on and helps organizations improve compliance
- 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

Environment administration features

Clustering and load balancing

- Supports horizontal scaling of line-of-business applications and their demand for computing resources
- Distributes workloads dynamically within the cluster to ensure that all server resources are fully utilized

Multiple levels of failover and redundancy

- Offers automatic failover protection and works with existing high-availability infrastructures to support various failover scenarios and redundancy provisioning

Centralized users and access management

- Keeps users and access management in a centralized database
- Decreases the administrative headaches of managing disparate user communities and empowers administrators to control application access on the user and group levels

Diverse administrative roles

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

Automatic upgrades

- Reduces the cost of upgrades by automatically rolling out ETX server-side components to all server nodes when the latest version is installed
- Applies most upgrades without interrupting user sessions and runtime patches can be applied selectively to test new functionality without affecting other users

Comprehensive activity log

- Allows administrators to quickly explore and inspect details of user and server activities through the intuitive web UI
- Enables users to easily export log entries for further analysis or archiving purposes

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

Environment administration features

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 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

- Support for NVIDIA GRID® technology for fast rendering and display compression of Linux and Windows remote sessions
- Supports extreme scalability and cost savings for high-end 2D and 3D application/desktop workloads

Designed for private/public cloud

- Employs a modern, web-centric architecture with web-based authentication and administration interfaces

Supported platforms

Web application server

- Red Hat® Enterprise Linux® 6.5 or later, 64-bit
- CentOS® 6.5 or later, 64-bit
- SUSE® Linux Enterprise Server 11 or later, 64-bit
- Oracle® Solaris® SPARC® 10 U11 or later, 64-bit
- Oracle Solaris x86-64 10 U11 or later, 64-bit

Connection node

- Oracle Solaris SPARC 10 U11 or later, 64-bit
- Oracle Solaris x86-64 10 U11 or later, 64-bit
- Red Hat Enterprise Linux 6.5 or later, 64-bit
- CentOS 6.5 or later, 64-bit
- SUSE Linux Enterprise Server 11 or later, 64-bit
- IBM AIX® 7.1 or later, 64-bit
- Windows 7 SP1, Windows 8.1 and Windows 10, 64-bit
- Windows Server® 2008 R2 SP1, 2012 R2, and 2016, 64-bit

Client platforms

- Windows 7 SP1, Windows 8.1 and Windows 10, 64-bit
- Windows Server® 2008 R2 SP1, 2012 R2, and 2016, 64-bit
- Red Hat Enterprise Linux 6.5 or later, 64-bit
- CentOS 6.5 or later, 64-bit
- SUSE® Linux Enterprise Server 11 or later, 64-bit
- MacOS™ 10.14 (Mojave) or later
- iPad® 4th Generation, iPad Air® 2, iPad Pro® 12 inch or later

Web browsers

- Microsoft Internet Explorer® 11
- Microsoft Edge®
- Mozilla Firefox®
- Google Chrome™
- Safari® 8 or later (applicable to Mac OS™ only)

 [See the demo](#)

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About OpenText

OpenText, The Information Company, enables organizations to gain insight through market leading information management solutions, on-premises or in the cloud. For more information about OpenText (NASDAQ: OTEX, TSX: OTEX) visit: opentext.com.

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