



SlickEdit License Server Administration Guide

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Running SlickEdit using the SlickEdit License Server

Borrowing a License from the License Server

Below are the full instructions for setting up the SlickEdit License Server to host SlickEdit Concurrent Licenses. **Please read each step carefully in its entirety before progressing to the next step.**

Setting up and Running the SlickEdit® License Server

Download the SlickEdit License Server installation file for the appropriate OS for the server machine.

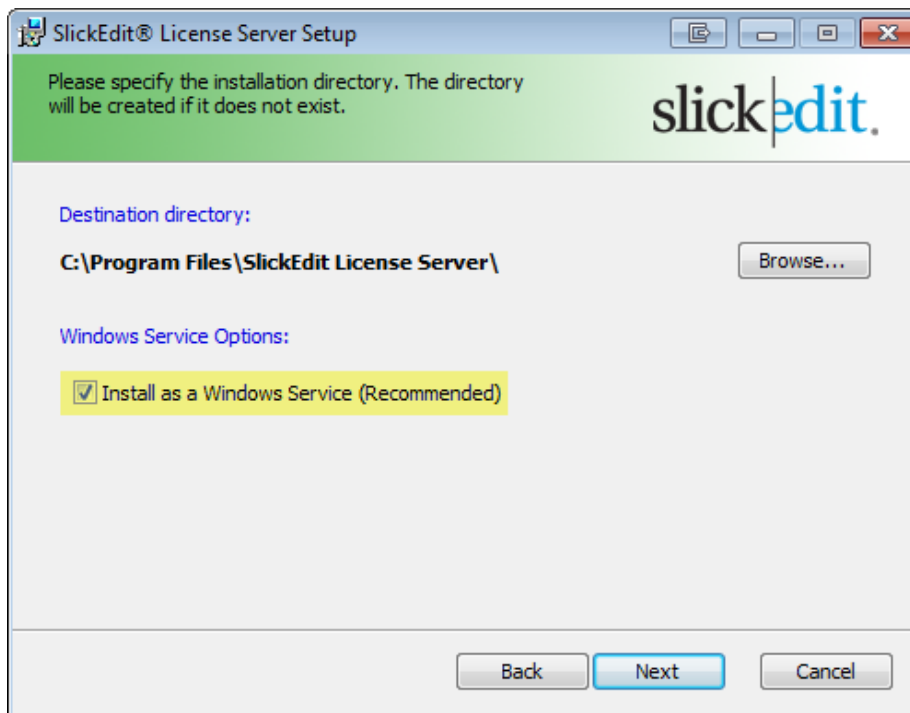
[Download Here](#)

Windows

1. Run the selicserver msi installation file to launch the SlickEdit License Server Setup Wizard.

-The default **installation path** is `\Program Files\SlickEdit License Server\` but can be changed during the setup.

-It is **highly recommended** to “Install as a Windows Service” which will install a new Windows service named “**SlickEdit License Server**”



2. When the installation is complete the install directory should contain the following files:

- selicserver.exe
- selicusage.exe
- selicutil.exe
- SlickEditInc.a.vendor
- SlickEditInc.b.vendor
- SlickEdit_License_Server_Admin_Guide.pdf

The SlickEdit License Server installation also creates a “**SlickEdit License Server**” configuration directory and associated files in the %CommonAppDataFolder%\ directory on the server machine. The default location is as follows:

Win7/Vista - C:\ProgramData\SlickEdit License Server

Win XP - C:\Documents and Settings\All Users\Application Data\SlickEdit License Server

Win Server 2008: C:\ProgramData\SlickEdit License Server\

NOTE: This directory will be referenced as the “*server config dir*” for the remainder of this document.

Once you have retrieved a copy of your SlickEdit license file it should be saved to the *server config dir* as listed above or to the *server installation directory*, and the **filename must end in “.lic”**.

Examples:

- slickedit.lic
- serverXYZ.lic

Once the license server has been installed and both the server installation and configuration directories have been populated with the appropriate files (see step #3 above), you can start the license service via Windows Control Panel > Administrative Tools > Services.

Simply right-click on the service “SlickEdit License Server” > select Start. The service is set to automatically start on boot, but a one-time only manual initial start is required.

Stopping the service is the same as starting. Simply right click on the SlickEdit License Service and select “Stop”.

*****IMPORTANT: When running the SlickEdit License Server as a service, all command line parameters must be set in the args.xml file in the *server config dir* before the service is started/restarted.*****

Linux/UNIX/Mac OS X

Use the tar command to extract the package's contents, which should include the following:

```
selicserver (executable)
selicusage (executable)
selicutil (executable)
SlickEditInc.a.vendor
SlickEditInc.b.vendor
SlickEdit_License_Server_Admin_Guide.pdf
```

Once you have retrieved a copy of your SlickEdit license file it should be saved to the server installation directory where the above files were extracted, and the **license filename must end in ".lic"**.

Examples:

```
slickedit.lic
serverXYZ.lic
```

Start the license server with the executable *selicserver* using the following parameters:

```
selicserver -p port_num
```

The *-p port_num* parameter is **not required** and will default to port 27100 if not specified. Make sure that the port is not being used by another application, and has clearance through all firewalls.

When *selicserver* is initially executed it will attempt to create the "SlickEdit License Configuration Directory" at the following default locations:

Linux/Unix - /var/selicserver/

Mac OS X - /Library/Application Support/SlickEdit License Server/

This directory will be referenced as the "*server config dir*" for the remainder of this document. Most likely you will need *root* permissions when running *selicserver* to successfully create the *server config dir* in /var/. If the appropriate permissions are not available at run time the server will shut down. It is possible to specify a particular *server config dir* at run time using the **-config** command line option (see the section on "Exploring the SlickEdit® Server Executable" for usage)

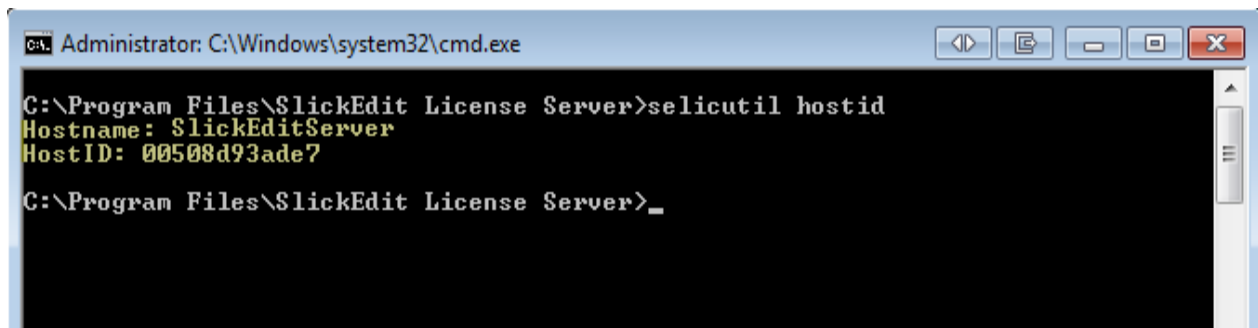
Using selicutil to obtain the HostID and HostName

Two pieces of information are required from the server machine to generate the SlickEdit license file. Both the **HostID** and **HostName** can be obtained by using the SlickEdit license utility *selicutil* as follows:

From a system command line change directory to the server installation directory, and run the command:

```
selicutil hostid
```

The results should look similar to the following:

A screenshot of a Windows command prompt window titled "Administrator: C:\Windows\system32\cmd.exe". The window shows the command "C:\Program Files\SlickEdit License Server>selicutil hostid" and its output: "Hostname: SlickEditServer" and "HostID: 00508d93ade7". The prompt then shows "C:\Program Files\SlickEdit License Server>_" indicating the command has completed.

```
C:\Program Files\SlickEdit License Server>selicutil hostid
Hostname: SlickEditServer
HostID: 00508d93ade7
C:\Program Files\SlickEdit License Server>_
```

```
HostName: SlickEditServer
HostID: 00508d93ade7
```

This information will be needed to generate the SlickEdit Networked Concurrent License File in the next step.

If more than one HostID is returned by the *selicutil hostid* command (typical when more than one network card is installed) you should use all available HostID's when generating the license file in the next step. For example, if the output of *selicutil hostid* looks like this:

```
HostName: SlickEditServer
HostID: 00508d93ade7 002c3e4e5a64
```

You will need to enter 005ffe93a5e7 1b2c3e4e5a64 as the HostID when generating the license file.

Generating the SlickEdit License File

To generate/download your SlickEdit license file please follow these steps:

1. Sign in to your slickedit.com web-account
2. Click "My Account" to view your Registered Products page
3. Click on the "License Download" icon for the serial number you that you wish to generation a license
4. Follow the instructions on the resulting page.

Installing the SlickEdit License File

Windows

Once you have generated and retrieved a copy of your SlickEdit license file it should be saved to the license server installation directory as determined in Step #1 where the default path is `\Program Files\SlickEdit License Server\`.

The license file can be renamed, but must end in “.lic”.

Examples:

```
slickedit.lic  
serverXYZ.lic
```

Once the license server has been installed, and the license file has been copied to the server installation directory, you can start the license service using **Windows > Control Panel > Administrative Tools > Services**.

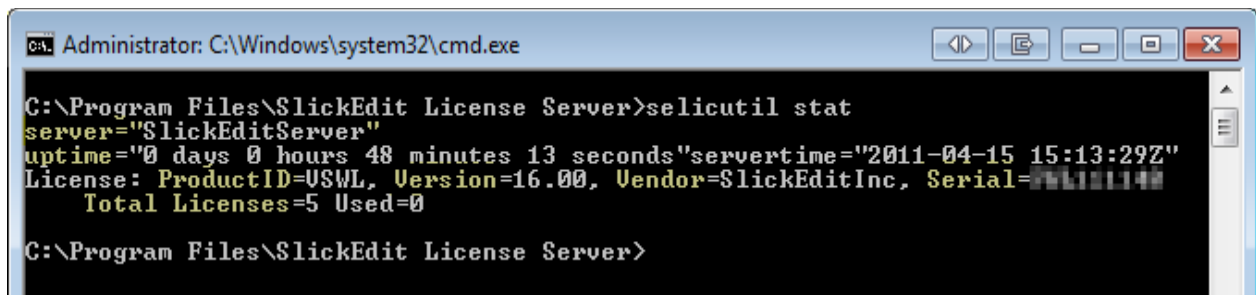
How to Start - To start the service right click on the “**SlickEdit License Server**” and select **Start**. The service is set to automatically start on boot, but a one-time only manual, initial start is required.

How to Stop - To stop the service right click on the “**SlickEdit License Server**” service and select **Stop**.

The default port used is 27100 which must not be used by any other application, and must have clearance through all firewalls.

You can confirm that the server is running, and the license file has been installed correctly by running the **stat** command from the server install directory:

```
selicutil stat
```



```
Administrator: C:\Windows\system32\cmd.exe  
  
C:\Program Files\SlickEdit License Server>selicutil stat  
server="SlickEditServer"  
uptime="0 days 0 hours 48 minutes 13 seconds"servertime="2011-04-15 15:13:29Z"  
License: ProductID=USWL, Version=16.00, Vendor=SlickEditInc, Serial=XXXXXXXXXX  
Total Licenses=5 Used=0  
  
C:\Program Files\SlickEdit License Server>
```

This command will provide you with the port@hostname of the server, the current uptime of the license server, information about the license being served, the total number of available licenses and the number of currently used licenses

Linux/Unix/Mac OS X

Once you have generated and retrieved a copy of your SlickEdit license file it should be saved to the license server installation directory as determined in Step #1.

The license file can be renamed, but must end in ".lic".

Examples:

```
slickedit.lic  
serverXYZ.lic
```

How to Start - Once the license server has been extracted, and the license file has been copied to the server installation directory, you can start the server with the following command:

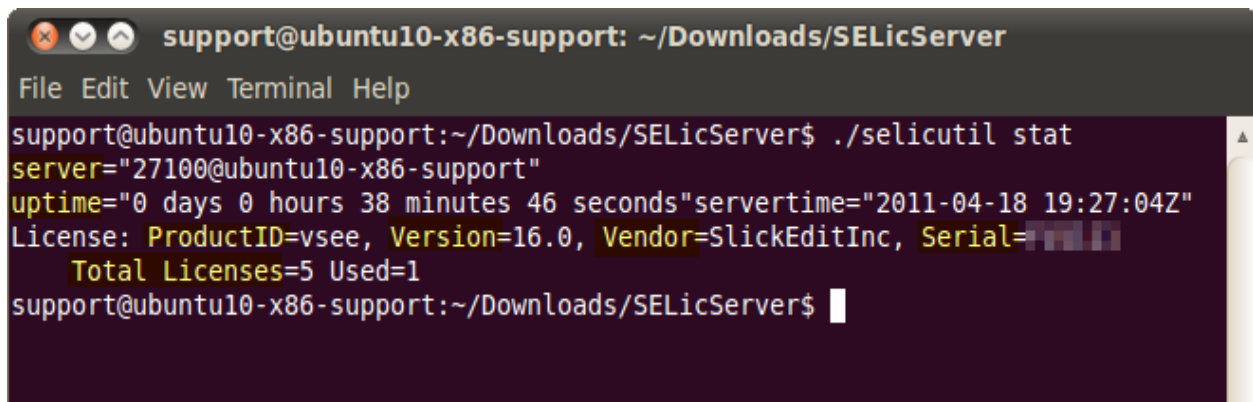
```
selicserver
```

How to Stop - Simply kill the running process to stop the license server.

The default port used is 27100 which must not be used by any other application, and must have clearance through all firewalls.

You can confirm that the server is running, and the license file has been installed correctly by running the **stat** command from the server install directory:

```
selicutil stat
```

A screenshot of a terminal window titled 'support@ubuntu10-x86-support: ~/Downloads/SELicServer'. The terminal shows the command './selicutil stat' being executed. The output displays server information: 'server="27100@ubuntu10-x86-support"', 'uptime="0 days 0 hours 38 minutes 46 seconds"', 'servertime="2011-04-18 19:27:04Z"', and 'License: ProductID=vsee, Version=16.0, Vendor=SlickEditInc, Serial=[REDACTED]'. It also shows 'Total Licenses=5 Used=1'. The prompt returns to 'support@ubuntu10-x86-support:~/Downloads/SELicServer\$'.

This command will provide you with the port@hostname of the server, the current uptime of the license server, information about the license being served, the total number of available licenses, and the number of currently used licenses.

Specifying License Files

The license server can manage multiple licenses and license files. By default, the server will scan the installation and configuration directory for license files with the **.lic** file extension. The server will attempt to install license files found at startup or during a reread. You can optionally set the server to look for specific files or scan specific directories at for license files with command-line arguments:

-license (-l) *filename*

Load license file *filename* (relative to working directory or absolute).

```
selicserver -license seTest.lic
```

-licensedir *dir*

Load license files from directory *dir* (relative to working directory or absolute). The following command will force the SlickEdit service to **only look** for license files which end in ".lic" in C:\seLicensePath\:

```
selicserver -licensedir C:\seLicensePath\
```

Both of the above commands can be used together to search for a renamed license file in a non-default path. The following example will look for the license file seTest.lic in the path C:\seLicensePath\:

```
selicserver -licensedir C:\seLicensePath\ -license seTest.lic
```

License File Format

The license file is a UTF-8 encoded XML document. The license file is Each license is defined by the **<License>** tag and may contain **<LicenseProperties>**, **<VendorProperties>**, and **<Signature>**.

<LicenseProperties>

Contain a set of **<Property>** tags. Each Property defines various named feature of the license. A property can define a feature about the product the license is bound by, or a property may be used to restrict license usage to a specific system or environment (Hostname or Hostid).

<Signature>

Used to authenticate the license and validate the license properties.

<VendorProperties>

Vendor specific properties. Not required.

Editing, changing, or removing LicenseProperties or Signature can invalidate the license, rendering it unusable. If the license is bound to any host properties (HOSTID, Hostname), and you need to move the license to a new environment, you will need to contact sales@slickedit.com and generate a new license file.

Example license layout:

```
<Licenses>
  <License>
    <LicenseProperties>
      <Property name="ProductID" value="XYZ"/>
      <Property name="Serial" value="123"/>
      <Property name="Version" value="0"/>
    </LicenseProperties>
    <Signature>
      ...
    </Signature>
  </License>
</Licenses>
```

Each <License> is nested within the <Licenses> tag. It is possible to combine multiple license files into a single file. The file must conform to XML rules. Each <License> tag must be properly nested by the parent <Licenses> tag. Sample multi-license file:

```
<Licenses>
  <!-- LICENSE #1 -->
  <License>
    <LicenseProperties>
      <Property name="Comment" value="
*****
*                               *
*      VOID LICENSE FILE      *
***** " />
      <Property name="Host" value="HostMachine"/>
      <Property name="HostID" value="012345678901"/>
      <Property name="LicenseCount" value="5"/>
      <Property name="LicenseType" value="CON"/>
      <Property name="ProductID" value="VSXX"/>
      <Property name="Serial" value="FX000000"/>
      <Property name="Version" value="16.00"/>
    </LicenseProperties>
    <Signature>
      ...
    </Signature>
  </License>

  <!-- LICENSE #2 -->
  <License>
    <LicenseProperties>
      <Property name="Comment" value="
*****
*                               *
*      VOID LICENSE FILE      *
***** " />
      <Property name="Host" value="HostMachine"/>
      <Property name="HostID" value="012345678901"/>
      <Property name="LicenseCount" value="5"/>
      <Property name="LicenseType" value="CON"/>
      <Property name="ProductID" value="VSXY"/>
      <Property name="Serial" value="FXY000000"/>
      <Property name="Version" value="16.00"/>
    </LicenseProperties>
    <Signature>
      ...
    </Signature>
  </License>
</Licenses>
```

Exploring the SlickEdit® Server Executable - selicserver

The SlickEdit executable in charge of serving licenses is *selicserver*, which can be executed as a command line application or as a service on Windows.

If running the server as a service on Windows, these settings must be saved in the file, "args.xml", which is located in the *server config dir*, and will then be passed to the service when it is started. No "args.xml" file exists on Linux/UNIX, but you can create a shell script for invocation.

Command line parameters for selicserver

-port (-p)

Set a specific port to be used, where *port_num* is the port used for the server (default is 27100):

```
selicserver -p port_num
```

-log [filename]

Enable server logging to the file. Defaults to *selicserver.log* in *server config directory*. Optionally specify file *filename* for logging.

```
selicserver -log
```

If a filename is specified, but no path is specified, the log file will be named appropriately and saved to the current working directory. If a path is specified it will be used along with the filename.

-logsize filesize

Set maximum log file size (Mbytes). Log file will be truncated when file size exceeds specified maximum size. Defaults to 32MB.

```
selicserver -log -logsize filesize
```

-license (-l) filename

Load license file *filename* (relative to working directory or absolute). Example:

```
selicserver -license seTest.lic
```

-licensedir dir

Load license files from directory *dir* (relative to working directory or absolute). The following command will force the SlickEdit service to **only look** for license files which end in ".lic" in C:\seLicensePath\:

```
selicserver -licensedir C:\seLicensePath\
```

Both of the above commands can be used together to search for a renamed license file in a non-default path. The following example will look for the license file *seTest.lic* in the path C:\seLicensePath\:

```
selicserver -licensedir C:\seLicensePath\ -license seTest.lic
```

-usage [filename]

Enable usage logging. Logs detailed information about license usage. Defaults to *selicserver.stat* in *server config directory*. Optionally specify the file *filename* for usage logging.

-usagesize *filesize*

Set maximum usage log file size (Mbytes). Log file will be truncated when file size exceeds specified maximum size. Defaults to 32MB.

-vendor *filename*

Load vendor file *filename*.

-vendordir *dir*

Load vendor files from *directory*. (Server installation and config directories are included by default).

-config *dir*

Set configuration directory path. This is useful when the required permissions are not available which are needed to write to the default config paths.

-quiet

Suppress console output.

-help (-?)

Displays the help screen, including Install path, Config path, and version number.

Linux/Unix only:

-detach

Allows the server to start as a background process, and then exits.

Exploring the SlickEdit® License Utility - selicutil

The executable that is used to manage and communicate with the SlickEdit license server is *selicutil*, and must be executed as a command line application.

License Utility options:

-s port@server

Specify the SlickEdit License Server with which you wish to communicate. If not specified, defaults to port 27100 and the local machine hostname.

-help (-?)

Display help message.

License Utility commands:

hostid

Displays the current machine's user information and host ids. [Note: this command does not require license server to be specified]

```
selicutil hostid
```

The results should look similar to the following:

```
Host: SELICSERVER  
HostID: 005ffe93a5e7
```

The **-all** flag can be used with the **hostid** command to echo the current username and DiskID (Windows).

stat

Report license server status. Retrieves license information including server port@server, uptime, current server time, SlickEdit feature, current version of SlickEdit supported, and SlickEdit serial number:

```
selicutil stat
```

Here is a list of the optional flags for the **stat** command:

```
stat -a
```

Display license and user information.

```
stat -v
```

Display verbose usage report.

```
stat -u UserName
```

Display license for user *UserName*.

```
stat -h HostName
```

Display license for host *HostName*.

down

Shut down the license server regardless of how it was started (as a service or command line application).

```
selicutil down
```

remove

Forcefully removes a specific user from the license server. Each removal requires the user's "CheckoutID", which can be obtained from the stat -a command.

```
selicutil remove <CheckoutId1> <CheckoutId2> <CheckoutId3>
```

Example:

```
selicutil remove 0 1 2
```

reread

Reread license and vendor files. If a specific license or license path was used when starting the server those options will be used by the reread.

```
selicutil reread
```

usage

Display real-time license usage report. License usage reports a current snapshot of license usage broken down by category: Vendor, ProductID, Version (if available), and Serial Number.

Here is a list of the optional flags for the usage command

```
usage -v
```

Display verbose usage report.

```
usage append filename
```

Append (copy) license usage log to specified filename.

version

Display version and configuration properties from port@server. Version report includes information like the license server version number, the build date, the title/name of the server utility, the current uptime, and the paths to the log file and usage files (if used).

```
selicutil version
```

The version output will include the following:

```
C:\work\selicserver>\work\selicserver\selicutil -s
27100@licenseserver01 version
Title: SlickEdit License Server Windows x64
Version: 1.0.0.3
Platform: Windows x64
BuildDate: Jul 14 2011 08:37:00
Servername: 27100@LicenseServer01
Install: C:\Program Files\SlickEdit License Server\
Configuration: C:\ProgramData\SlickEdit License Server\
Log: C:\ProgramData\SlickEdit License Server\selicserver.log
Usage: C:\ProgramData\SlickEdit License Server\selicserver.stat
Uptime: 5 days 0 hours 59 minutes 20 seconds
```


borrow

Check out and borrow a license from the server.

```
selicutil borrow <vendor> <ProductID> <ProductVer> <ReturnDate> <ReturnTime>
```

NOTE: Users should use the SlickEdit License Manager dialog available in the product to borrow a license.

The ReturnDate must be in the format YYYY-MM-DD, the ReturnTime format should be HH:MM and uses a 24 hour clock (1:00pm = 13:00 and 00:00 for midnight). The ReturnTime is optional, and will default to midnight on the ReturnDate if not specified.

The arguments required by the borrow command--<vendor>,<ProductID> and <ProductVer>-- can be found by using the **selicutil stat** command. See the section above on the stat command for more information.

Example output from stat command:

```
c:\LicenseServer\>selicutil stat
server="27100@LicenseServer01"
uptime="28 days 1 hours 13 minutes 13 seconds" servertime="2011-06-30
19:16:58Z"
Licenses:
  ProductID=vsee Version=16.0 Vendor=SlickEditInc Serial=FU00016
  Total Licenses=25 Used=7
```

In the above output (highlighted) we have the following:

ProductID = vsee
ProductVer = 16.0
Vendor = SlickEditInc

Example borrow command:

```
selicutil -s 27100@myserver borrow SlickEditInc vsee 16.0 2011-1-22
```

The borrow command has 2 variations, **-status** and **-return**, which retrieve all license borrow information for the current user and returns all borrowed licenses for the current user, respectively.

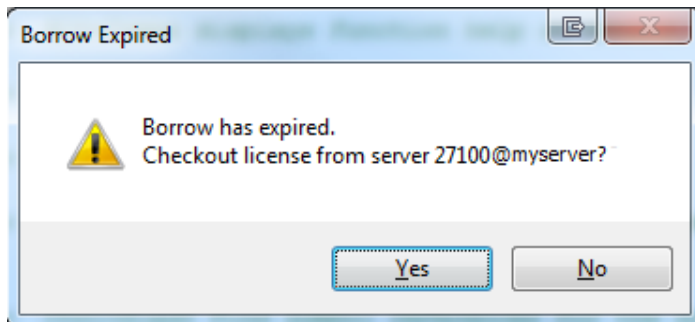
```
selicutil -s 27100@myserver borrow -status
```

```
selicutil -s 27100@myserver borrow -return
```

NOTE #1: The parameter **-s port@host** is **required** for the borrow command because users will not be running the command from the server, and must point to it instead.

NOTE #2: The default **MAXIMUM** borrow duration is 720 hours (30 days). If a user attempts to borrow a license for longer than the allowed time the expiration date will be set to the maximum available (30 days) and will expire at the same time of the day as the borrow was performed on the 30th day, instead of at midnight.

If a borrowed license expires during an editing session the user will be alerted with the following pop-up dialog:



Each time a file is saved, SlickEdit will check to ensure that a valid license is present. If a borrowed license has expired the user will be prompted to check out a license from the same server that it was borrowed from. If "No" is selected, the user will be prompted to save any/all currently modified files, and SlickEdit will close. The next time SlickEdit is started an attempt to check out a license will be performed. If unsuccessful, the License Manager will appear.

Exploring the SlickEdit® License Usage Report Tool - selicusage

The executable is used to generate license usage reports for SlickEdit license servers using usage logging option (-stat). The reporting tool will parse the usage log from the license server and create a usage report for a specific time period. The report tool can be configured to generate a daily usage report over a range of days or an hourly report for any given date. The report format is CSV (Comma-Separated Values). The tool generates a report on license usage, containing the report time period (TIME), maximum number of license used during time period (MAXUSED), the number of denied license requests (DENIED), and the total number of available licenses (AVAILABLE). A denied licensed request occurs when there are no available licenses available for checkout.

Example:

```
selicusage -day 2011-05-25 2011-05-31 -f "selicserver.stat"
TIME,MAXUSED,DENIED,AVAILABLE
2011-05-25,10,0,60
2011-05-26,12,0,60
2011-05-27,12,0,60
2011-05-28,12,0,60
2011-05-29,3,0,60
2011-05-30,3,0,60
2011-05-31,12,0,60
```

```
selicusage -hour 2011-05-28 -f "selicserver.stat"
TIME,MAXUSED,DENIED,AVAILABLE
2011-05-28 00:00,2,0,60
2011-05-28 01:00,2,0,60
2011-05-28 02:00,2,0,60
2011-05-28 03:00,2,0,60
2011-05-28 04:00,2,0,60
2011-05-28 05:00,2,0,60
2011-05-28 06:00,2,0,60
2011-05-28 07:00,2,0,60
2011-05-28 08:00,5,0,60
2011-05-28 09:00,9,0,60
2011-05-28 10:00,12,0,60
2011-05-28 11:00,12,0,60
2011-05-28 12:00,9,0,60
2011-05-28 13:00,12,0,60
2011-05-28 14:00,11,0,60
2011-05-28 15:00,11,0,60
2011-05-28 16:00,10,0,60
2011-05-28 17:00,10,0,60
2011-05-28 18:00,8,0,60
2011-05-28 19:00,4,0,60
2011-05-28 20:00,3,0,60
2011-05-28 21:00,3,0,60
2011-05-28 22:00,3,0,60
2011-05-28 23:00,3,0,60
```

License Usage Reporting Tool options:

-day [*start date YYYY-MM-DD*] [*end date YYYY-MM-DD*]

Generate daily report. Optionally specify start and end date for reporting. If only start date is specified, only generates report for that day. If no start or end date specified, defaults to current date.

-hour [*date YYYY-MM-DD*]

Generate hourly report (local time). Optionally specify date for reporting. Defaults to current date.

-vendor *vendorname* [*vendorname*] [*vendorname*] ...

Specify which vendor(s) are to be included in usage report. Defaults to all vendors.

-product *productname* [*productname*] [*productname*] ...

Specify which specify product id(s) are to be included in usage report. Defaults to all product ids.

-serial *serial* [*serial*] [*serial*] ...

Specify which serial number(s) are to be included in usage report. Defaults to all serial numbers.

-version *version* [*version*] [*version*] ...

Specify which version(s) are to be included in usage report. Defaults to all version numbers.

Exploring the SlickEdit Server Configuration Directory

The SlickEdit License Configuration directory (*server config dir*) is created during installation (Windows) or when the license server, selicserver, is started for the first time (Linux/UNIX/Mac OS X).

The following are the default paths for the SlickEdit Server Configuration for each supporting platform:

Win7/Vista – “C:\ProgramData\SlickEdit License Server”

XP – “C:\Documents and Settings\All Users\Application Data\SlickEdit License Server”

Win Server 2008 – “C:\ProgramData\SlickEdit License Server\”

Linux/UNIX - /var/selicserver/

Mac OS X - /Library/Application Support/SlickEdit License Server/

The server directory contains several files to that may be used by the license server. The following files are either included by default when the *server config dir* is created or must be created manually.

args.xml (Windows only)

Used to send command line parameters to the SlickEdit Server when running as a Windows service.

servers.xml

Used to specify separate servers when running a redundant server environment.

selicserver.log

Default log file created when running selicserver –log.

options.vslicoptions.xml

Sets import/export groups and the TIMEOUT duration to manage the distribution and recollection of licenses.

licensestore.xml

Preserves the license state.

selicserver.stat

Default license usage log file created when running selicserver –usage.

NOTE: All configuration and license files are XML based. Use an editor that does not add embedded formatting data to the file. We recommend using SlickEdit, nedit, notepad, vi or any XML capable editor.

Creating and Using the “args.xml” Options File (Windows only)

When running the license server as a Windows service the options file “args.xml” must be used to pass parameters to the selicserver service. These are the same parameters as you would pass on the command line if not running *selicserver* as a service. Below is an example of args.xml formatting.

```
<ServerConfiguration>
  <!--
    For a list of all command line arguments, run the server with the -help
    argument.

    selicserver -help
  -->

  <CommandLine args="-port 27100 -log -licensedir <PathHere>" />
</ServerConfiguration>
```

NOTE: All of the parameters for *selicserver* can be found on page 12 of this document.

Setting up a Redundant Server Environment

Required File: **servers.xml**

Servers can be installed on any supported operating systems or supported architecture. Servers must be configured identically with matching licenses, server list (servers.xml), vendor files (.a.vendor and .b.vendor), and options files (options.vslicoptions.xml). By default the licensing server operates as a single server. To configure a redundant server environment, the server must load the server list configuration file (servers.xml) at startup from the server configuration directory. The server configuration file lists the server count, server hostnames and server addresses for all servers deployed for redundant licensing. The required file servers.xml is located in the *server config dir*.

Example servers.xml for a three-server setup:

```
<Servers>
  <Server hostname="SlickEditServer01" address="27100@SlickEditServer01" />
  <Server hostname="SlickEditServer02" address="27100@SlickEditServer02" />
  <Server hostname="SlickEditServer03" address="27100@SlickEditServer03" />
</Servers>
```

Servers are listed in priority order. The hostname attribute is the identifying hostname of the server and the address is port@hostname. A server must be able to identify itself by the correct hostname from the server list. The priority order and hostnames must be the identical on all deployed servers.

Servers configured for redundant server deployment can only host licenses generated for redundant servers. Also, a single server deployment is not able host a license generated for redundant servers.

Once configured identically, servers can be started in any order. A server starts in synchronizing mode and awaits connections from the other servers. After all servers have connected and synchronized, licensing operations can begin. The highest priority server becomes the primary server. Lower priority servers serve as secondary servers.

The primary server handles all licensing requests; secondary servers maintain synchronization with the primary server. If a primary server goes offline, the primary will shift to the next highest priority secondary server. Licensing can continue as long as at least one server is running as primary. If any server goes offline, it will need to restart and re-synchronize with the primary server. Re-synchronization can only occur when all servers are reconnected and are ready to synchronize. After re-synchronization, the highest priority server, as listed in servers.xml, assumes primary licensing.

Creating and Using License Include/Exclude Groups

Required File: **options.vslicoptions.xml**

This is basic description of the Include/Exclude feature of the SlickEdit License Server. This is an advanced option for license administrators, not everyone is going to use this. The required file options.vslicoptions.xml is located in the *server config dir*.

Include/Exclude rules for SlickEdit License Server.

<Group>

Defines a named group.

<User>

Defines a User belonging to a named group. All checkouts transmit identifying properties to identify a user. If Checkout properties match all the attributes for a User, it is consider part of the Group. User may be defined using any combination of attributes:

UserName, HostName, HostID, DiskID (Windows only)

<Include>

Defines a rule that allows only users from the specified Group are allowed to use the specified license(s). An Include rule restricts license usage to only to the users in matching group(s). You can include more than one group for the same license.

GroupName and Vendor are required attributes. ProductID, Version, and Serial are properties in the license files to match against and you can use any or all of the properties for the Include rule.

<Exclude>

Defines a rule that users from the specified Group are not allowed to use the specified license. You can exclude more than one group for the same license.

GroupName and Vendor are required attributes. ProductID, Version, and Serial are properties in the license files to match against and you can use any or all of the properties for the Exclude rule.

Example:

```
<Options>
  <Group Name="Group01">
    <User UserName="jsmith" HostName="smith-PC"/>
  </Group>
  <Group Name="Group02">
    <User UserName="ajones" HostName="jones-PC"/>
  </Group>
  <Include GroupName="Group01" Vendor="SlickEditInc" ProductID="VSEE"
Version="16.00" Serial="EE1000"/>
  <Exclude GroupName="Group02" Vendor="SlickEditInc" ProductID="VSEE"
Version="16.00" Serial="EE1001"/>
</Options>
```


In this example, only users defined in “Group01” are allowed to checkout on the specified license (ProductID="VSEE" Version="16.0" Serial=" EE1000").

If there are no more checkouts available on Serial "EE1000" for a user in “Group01”, then it will attempt checkout on another license where rules allow.

Users in “Group02” are not allowed a checkout on the license specified (ProductID="VSEE" Version="16.0" Serial="EE1001"). A user can checkout on any other license where rules allow

Setting the idle TIMEOUT feature

Required File: **options.vslicoptions.xml**

By setting the Timeout feature, the server will check if the client application has been inactive. If the client application has been inactive for longer than the specified timeout, the license checkout is released. The required file options.vslicoptions.xml is located in the *server config dir*.

The **Time** attribute specifies the timeout period in seconds. To specify a Timeout for a specific license, you may optionally set **Vendor**, **ProductID**, **Version**, or **Serial** attribute that match exactly the property in the license file.

Example: Set a one hour timeout:

```
<Options>
  <Timeout Time="3600"/>
</Options>
```

Setting the Borrow Limit

Required File: **options.vslicoptions.xml**

You can changes the maximum time limit specified by the license file for borrows. The new max borrow limit cannot exceed the borrow limit specified by the license. The required file options.vslicoptions.xml is located in the *server config dir*.

The **Time** attribute specifies the new max borrow limit in hours, and sets the default borrow limit for all hosted licenses. To specify a maximum borrow limit for a specific license, you may optionally set **Vendor**, **ProductID**, **Version**, or **Serial** attribute that match exactly the property in the license file.

Example, set the borrow limit to 120 hours for all licenses with ProductID “vswl”.

```
<Options>
  <BorrowLimit Time="120" ProductID="vswl"/>
</Options>
```

Disable Shutdown command

Required File: **options.vslicoptions.xml**

By default, the license server is allowed to be remotely shutdown using the SlickEdit License Utility down command.

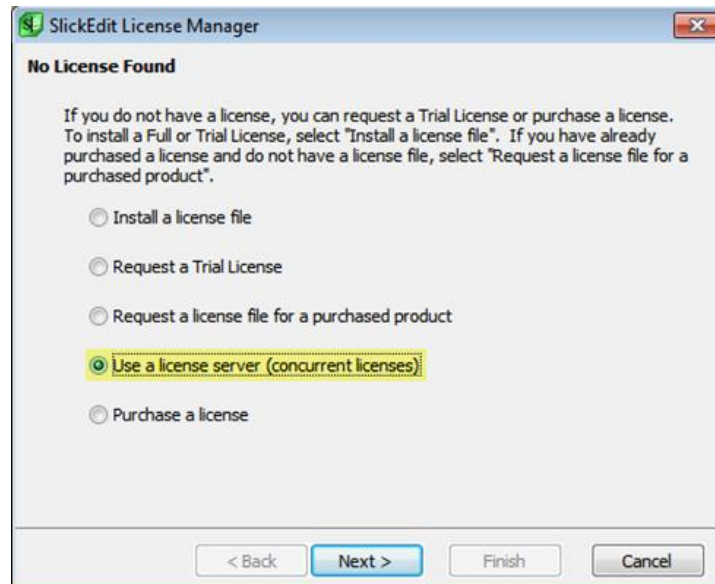
```
selicutil -s 27100@licenseserver down
```

To disable this feature, add DisableShutdownCommand feature to the options configuration . The required file options.vslicoptions.xml is located in the *server config dir*.

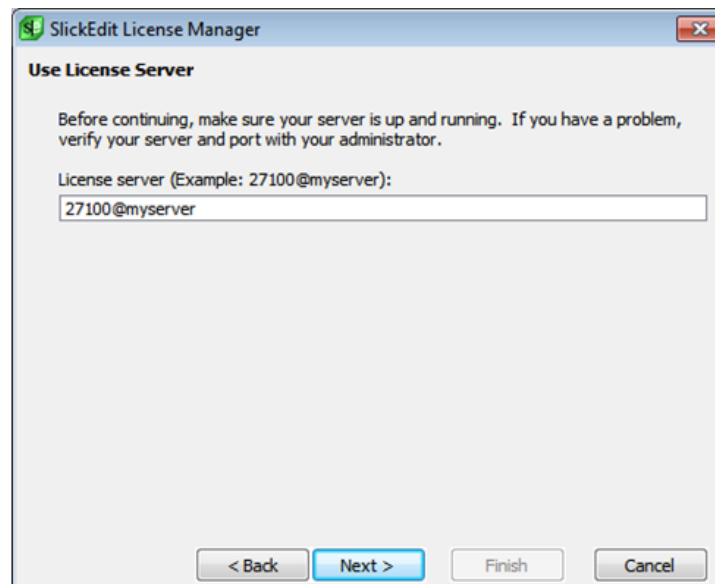
```
<Options>
  <DisableShutdownCommand/>
</Options>
```

Running SlickEdit using the SlickEdit License Server

1. When SlickEdit starts for the first time the SlickEdit License Manager will appear. To connect to a SlickEdit License Server select "User a license server (concurrent licenses)" and click Next.

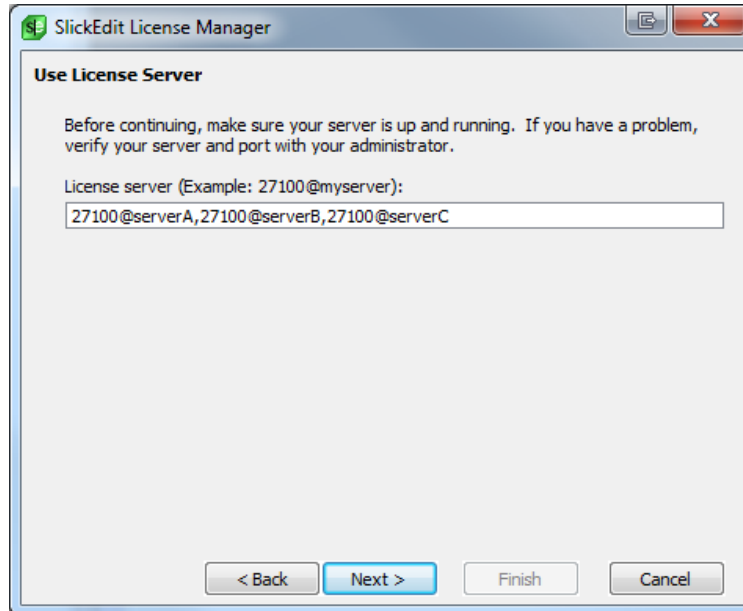


2. On the next screen enter the port@hostname of the license server and click Next.



If the next screen says "Successful license checkout", then you are done and should be able to use SlickEdit. Otherwise please read the troubleshooting tips below, and then contact your system administrator.

If you are using a multi-server environment, the port@hostname should all be listed and comma delimited.



NOTE: Alternatively you can set the port and server information with the system environment variable `SLICKEDIT_LICENSE_SERVER` as follows:

```
set SlickEDIT_LICENSE_SERVER=27100@myserver
```

This will force SlickEdit to check the port@server host for a valid license server, and attempt to check out a license file from it.

Troubleshooting Tips

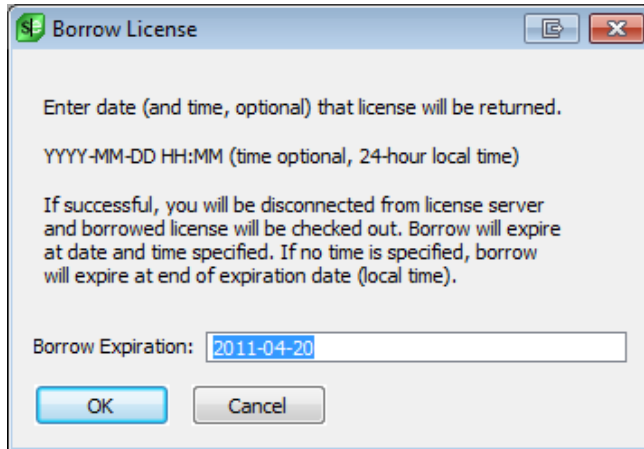
- Make sure that each client machine running SlickEdit can "see" the license server. Confirm this with the 'ping' command line utility.
- Make sure that the necessary SlickEdit License Server port is allowed through all firewalls. The default port is 27100.
- Contact your IT or License Admin before contacting SlickEdit.

Borrowing a License from the License Server

(To set the Borrow Limit see page 23)

If you need to use SlickEdit, but will no longer be connected to the SlickEdit License Server, you can borrow a license to take "on the road". This process is simple and the functionality is now included on the SlickEdit Menu.

Go to Help > Licensing > Borrow License > and enter in the date which you wish to return the license to make it available in the license pool. The default **MAXIMUM** borrow duration is 30 days.



It is possible to return a borrowed license before its expiration. To return a borrowed license early go to Help > Licensing > Return License. The server information should be automatically entered for you.

