

WellCAD

Guidelines for Network Administrators

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From version 5.6 onwards, WellCAD TM uses a licensing technology called Sentinel (from Thales). This document provides guidelines on the configuration and administration of Sentinel network licenses for WellCAD™.

Please note that this installation should most likely be carried out by your IT/Network administration or with their assistance.

► **Please make sure to check the Troubleshooting and tips section in case of an issue prior to contact ALT's technical support.**

Server preparation

Server preparation Before a computer can be used as a network server, it needs to be configured. Please perform the following steps :

1. Ensure the server has access to ems.alt.lu on port TCP/443 (standard HTTPS). This outgoing connection is used for license activation/installations and license updates.
2. Ensure the server is accessible to all client machines via port TCP/1947. Inbound connections on this port are used to provide the client with a license to use WellCAD.
3. Download and install [WellCAD Network Licensing](#). This package includes the Sentinel runtime environment and applications for activating, updating and managing licenses.

Activating and installing a new network license

To activate a network license, you will be provided with an activation code by ALT. The code takes the form xxxxxxxx-xxxx-xxxx-xxxx-xxxxxxxxxxxx. Please note, activation codes can only be used once, and activating a license binds it to the server it is activated on.

To activate and install a new network license :

1. Under the *WellCAD Network Licensing* group in the Start Menu, select *Install or Update WellCAD License*. You will be presented with the dialog box in Figure 1.
2. Copy the activation code provided by ALT into the corresponding edit box and click the *Activate License* button. If successful, you will be presented with a confirmation message (see Figure 2).
3. Close the dialog box. The license is now activated and installed on the server.

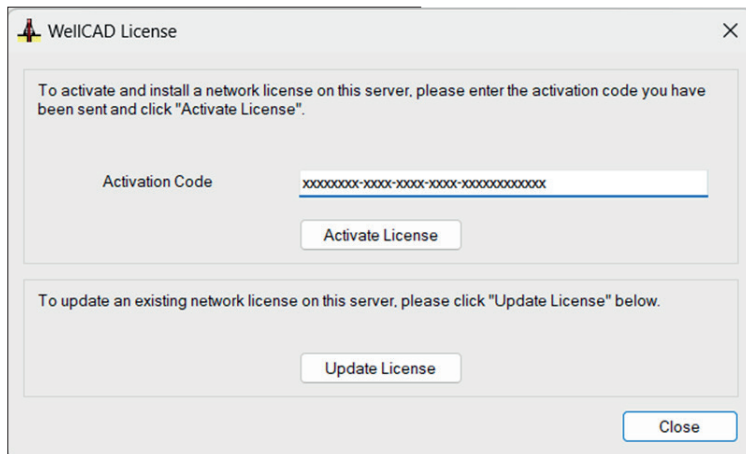


Figure 1
WellCAD License activation and update dialog box

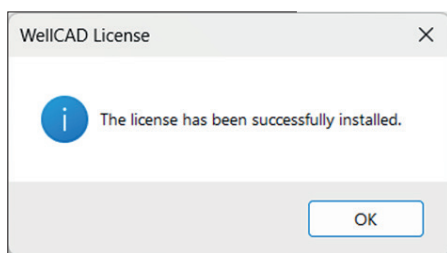


Figure 2
WellCAD License was successfully installed and activated

Installation of WellCAD on client machines

To install and configure WellCAD on a client machine:

1. Download and install **WellCAD**
2. Under the *WellCAD* group in the Start Menu, click *WellCAD*.
3. The Sentinel licensing system will automatically attempt to find an appropriate licensing server using broadcast packets on your local network. If it is successful, WellCAD will load and there is nothing further to do.
4. If a licensing server cannot be automatically found, you will be presented with a *License Configuration* dialog box as shown in Figure 3.
5. Ensure that the *Network* option is selected and enter the IP address or host name of the license server. Click *OK* to start WellCAD.

Note, for automatic deployments of WellCAD, the license server hostname or IP can be specified by setting the **WELLCAD_LICENSE_SERVER** environment variable on each client machine.

In case of technical issues, refer to section 6.

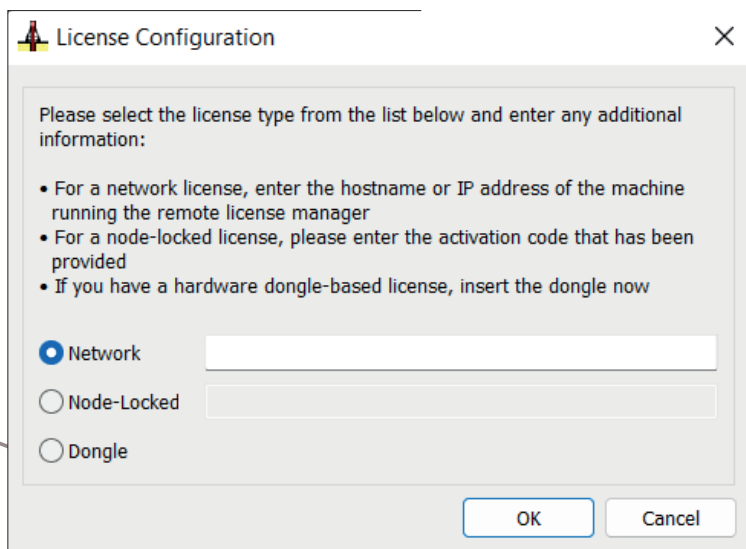


Figure 3
WellCAD License Configuration dialog box for license activation and update

Updating a network license

ALT can automatically offer updates to existing WellCAD licenses via an online update mechanism. These updates may be for additional seats, add-on modules or newer versions of WellCAD. To perform a license update, follow the steps below on the network licensing server:

- Open the Windows Start menu and WellCAD *Network Licensing* group.
- Click on Install or Update *WellCAD License* to open the *WellCAD License* dialog box (see Figure 1).
- Ensure that you are connected to the internet and click the *Update License* button.
- If there is an update waiting, a message box (see Figure 4) will inform you and ask for permission to proceed.
- After successfully updating the license, a confirmation message will be displayed.

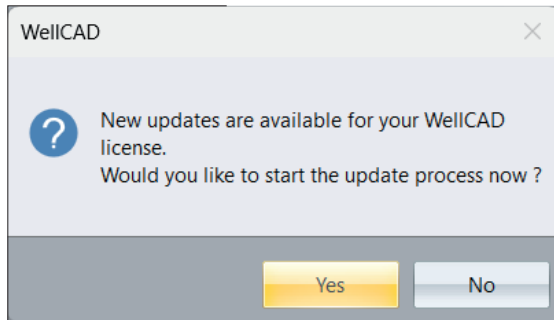


Figure 4
WellCAD Updates

In the case that the license update includes a version upgrade (e.g. updating from version 5.8 to 6.0), the WellCAD application on the client machines will also have to be upgraded to be able to access the new functionality.

Borrowing a network license

Borrowing a license allows the user to transfer a license from the license server to his computer to be used off-line for a defined time window.

- Open the Windows Start menu and WellCAD group.
- Click on *WellCAD Borrow* to open the dialog box providing the borrowing options (see Figure 5).
- Enter the desired date and time for the return of the license (Ensure the date does not exceed the maximum borrowing period or license expiration dates. The maximum borrowing period can be defined in the Admin Control Center and is set to 28 days by default.)
- Select the add-on modules that are required while working off-line.
- Click the *Borrow* button to detach a license from the server.

If the return date has been reached the detached license will automatically expire. To return a detached license earlier click the *List Borrowed Modules* button and in the *WellCAD Modules* dialog box click on *Return Borrowed Modules Early*.

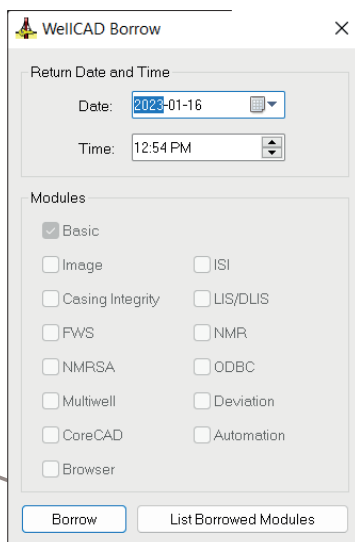


Figure 5
WellCAD Borrow dialog box

Re-hosting a network license

Re-hosting is the process of disabling a license on one license server and enabling it on another one. Before beginning, ensure the new licensing server is correctly prepared and the WellCAD Network Licensing software package is installed, as stated on the first page.

- Start the *Transfer WellCAD License* application on the new server from the *WellCAD Network Licensing* group in the Windows Start menu.
- In the *RUS* dialog box select the *Transfer License* tab (see Figure 6) and follow the instructions provided under the *Collect information about the recipient computer* (Step 1) section and save the information in a Recipient Information File.
- Open the *Transfer WellCAD License* application on the current license server.
- Follow the instructions provided under the *Generate the license transfer file* (Step 2) section, to read the Recipient Information File, and generate the Transfer File.
- Open the *Transfer WellCAD License* application on the new license server and open the *Apply License File* tab.
- At the bottom of the tab, select the *Transfer File* and click on *Apply Update* to enable the license.

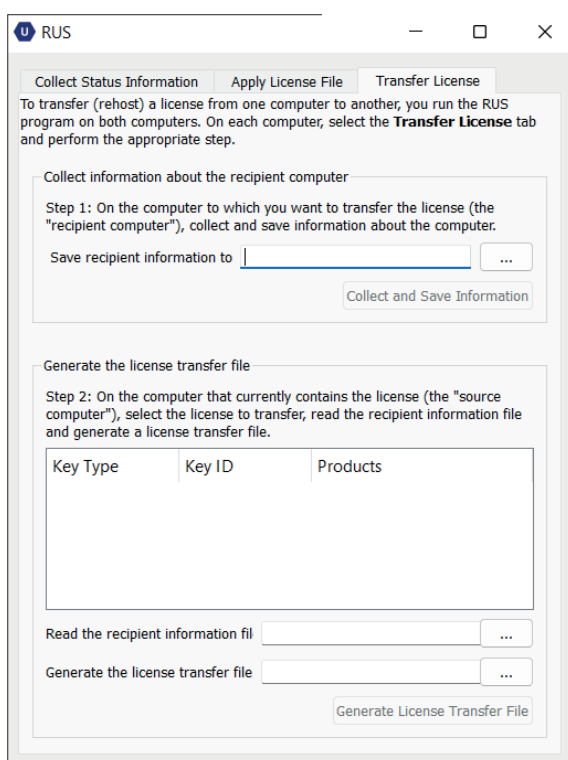


Figure 6

Remote Update System (RUS) named Transfer WellCAD License in the Windows Start menu

Advanced administration

The Sentinel licensing technology used provides a helpful Admin Control Center (ACC) that can be used for configuring, monitoring, and debugging the licensing. The ACC is accessible on both the network server, and the client machines. By default, it is only accessible locally.

To access the Sentinel ACC :

- Open a web browser.
- Navigate to <http://localhost:1947>

The navigation bar on the left of the ACC (Figure 7) provides useful administration functionality, such as:

- an overview of the installed licenses (Sentinel Keys),
- a list of all local and remote sessions (Sessions),
- a portal to configure basic and advanced settings (Configuration).

Please click on the Help icon in the upper right corner of the ACC for comprehensive documentation on the functionality available.

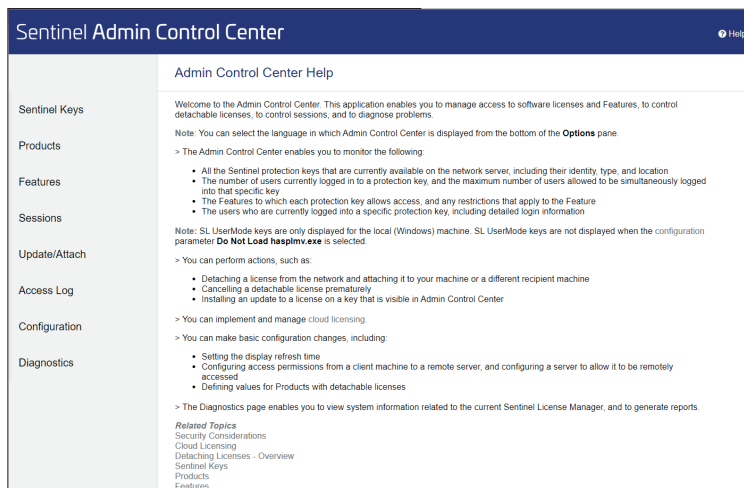


Figure 7
Sentinel Admin Control Center

Troubleshooting and tips

Internet connectivity

If you cannot activate or upgrade a network license on the network server, it could be due to connectivity issues between your server and ems.alt.lu. To test connectivity, please open a command prompt and use curl to check connectivity: `curl https://ems.alt.lu/hello` If you have a connection, you should receive a response of: "Hey there!" If you don't receive this response, it is likely that your firewall or router is interfering with connections to ems.alt.lu.

Server connectivity

If the client machines are failing to find a valid license server, it is likely that traffic to your license server on port 1947 is being blocked. You can test the connection on the client machine via a command prompt and `curl http://licenseserver:1947/` This should return "403 Forbidden"

Invalid licenses

If your client machine reports "No valid license could be found", there are a few possible problems that can be debugged in the following sections

Expired license

On the server machine, navigate to http://localhost:1947/_int_/features.html. If your license has expired, it will be indicated in the "Restrictions" column. Please try updating your license if you believe it has expired erroneously.

Cloned license

Sentinel licensing has sensitive clone detection to protect against license server duplication. In the case where this has been triggered, the license will be marked as "Cloned" in red text at http://localhost:1947/_int_/devices.html on the server machine. If this is the case, please generate a C2V file by clicking the "C2V" button to the right of the cloned license (Figure 8) and email it support@alt.lu.

Location	Vendor	Key ID	Key Type	Configuration	Version	Sessions	Actions
Local	Advanced Logic Technology SA (40107)	406114625353103803	HASP SL AdminMode		8.32		Products Features Sessions Certificates C2V

Figure 8
Generating the C2V from a cloned Sentinel key in the Sentinel Admin Control Center

Activation code reuse

If, upon activation, you receive an error prompt stating the activation code is disabled, it means the activation code was already used. Activation codes are one time use. Please verify with your colleagues that the activation code you were provided has not been used elsewhere (including accidentally on a client machine).

If the license was activated on another machine, please follow the section on rehosting a license to move it to the server machine.

Restricting license access

Sentinel provides a powerful way to restrict which users can access which licenses and products. To configure this, navigate to http://localhost:1947/_int_/config_users.html on the server machine and populate the user restrictions access list.

Comprehensive documentation on the rule syntax and how they are applied can be found at http://localhost:1947/_int_/ACC_help_config_users.html

Installing more licenses on a client machine

If a client machine is already utilising a network license, it will not display the license setup dialog when WellCAD first starts. To access this dialog and allow installation of node locked licenses on a client machine:

- Open WellCAD
- Click *Help*, then *About WellCAD*
- Click the *Configure* button
- Enter

Specifying a license server on a client machine

Although license access should generally be configured on the server side, it is also possible to specify which license server is used when WellCAD starts on the client machine. To do this:

- Navigate to http://localhost:1947/_int_/config_to.html on the client machine
- Uncheck *Broadcast Search for Remote Licenses*
- In the *Remote License Search Parameters* box, append the name of the license server you'd like to use