Licensing Procedures Reference

Apply and manage licenses.

Licensing Procedures (Reference) for license activation, management, and troubleshooting.

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Activation Methods

Online Activation

1. Open **Solution Center Your License**
2. Click **Activate** in Online Activation
3. Enter SerialNumber and ActivationCode
4. Confirmation appears immediately

Requirements: Internet connection to license server

Offline Activation

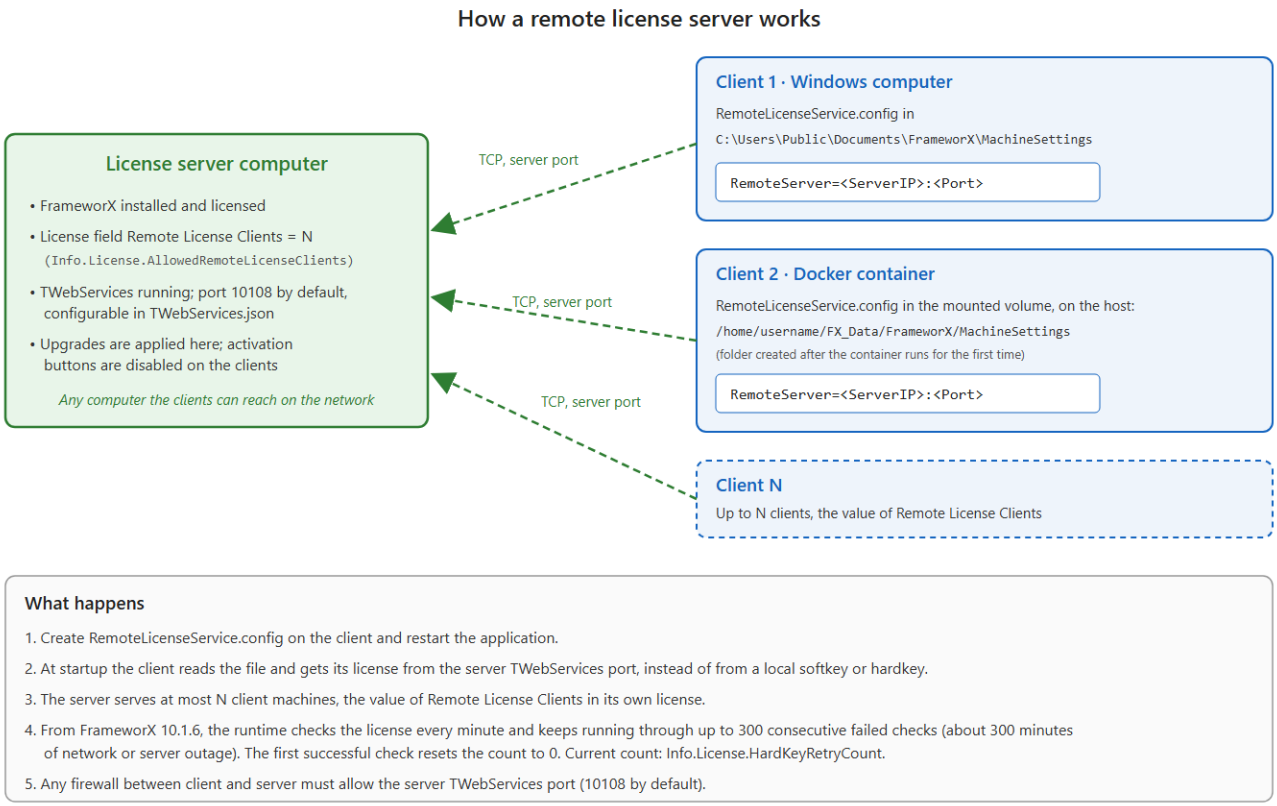
For air-gapped systems, in **Solution Center Your License**:

1. **Generate Request**
   - Click "Get Site Code"
   - Save .txt file with machine fingerprint
   - Send this .txt file to Tatsoft sales team
2. **Process Request**
   - Contact Tatsoft sales team
   - Send them this .txt obatained in the last section
3. **Apply License**
   - You will receive a license key back (.txt file)
   - Load this file in **Load license key**

Hardware Dongle

1. Insert USB dongle
2. Wait for driver installation (automatic on Windows 10+)
3. License auto-detected
4. Transfer between systems by moving dongle

License Server Setup



Server Configuration:

1. The Server computer must have the software platform installed and licensed.
2. The software must have applied license for the remote license server allowing a field higher than 1.
3. Start TWebService on port 10108

Client Configuration:

1. Create `RemoteLicenseService.config`:

```
RemoteServer=<ServerIP>:10108
```

1. Place in `C:\Users\Public\Documents\FrameworX\MachineSettings`
2. Restart application

License server outage: From FrameworX 10.1.6, a runtime licensed from a remote license server checks the license every minute and keeps running through up to 300 consecutive failed checks, about 300 minutes of network or license server outage. The first successful check after the outage resets the count to 0. The property `Info.License.HardKeyRetryCount` shows the current count of failed checks. Runtimes with a local license (softkey or hardkey) behave as before.

License Upgrade

When you buy an upgrade for an existing license (more I/O, another edition, more clients), Tatsoft records it on the license server for your serial number. How you apply it depends on how the computer was activated.

Online Upgrade

For a computer activated online with an activation code. You do not need a new code.

1. Open **Solution Center Your License**.
2. Wait a few seconds while the page checks the license server, or click the refresh icon. When an upgrade is waiting, the button in **Online Activation** reads **Upgrade** and is enabled.
3. Click **Upgrade**. The SerialNumber and ActivationCode are already filled in.
4. Click **Upgrade** in the dialog. The new license is applied and a confirmation appears.

If the button reads **Upgrade** but stays disabled, no upgrade is waiting for your serial number yet. Requirements: Internet connection to the license server.

Other Cases

- **Offline computer:** follow the **Offline Activation** steps above. Generate a new Site Code, send it to Tatsoft, and load the license key you receive.
- **Hardware dongle:** keep the dongle connected and follow the Offline Activation steps.
- **Remote license server:** apply the upgrade on the license server computer. The activation buttons are disabled on client computers, which get their license from the server.

License Information

Access via **Solution Center Help License**. The page shows the license identity, expiration, and the capacity limits granted by the license:

Field	Description	Example
Product Edition	FrameworX edition and I/O	FrameworX 1500 I/O
License Type	Runtime	Runtime
Serial Number	Unique identifier	12345
Expiration	End date if applicable	2025-12-31
Hardkey Status	Dongle detection	Present /Absent
Concurrent Users	Maximum number of display clients (Rich Client, Smart Client, and HTML5 Web Client) that can be connected to the runtime at the same time. All display client types count toward this same limit.	5
Engineering Users	Maximum number of users who can edit the same solution concurrently in Designer.	100
Remote License Clients	Number of client machines that can obtain a license from this computer when it acts as a remote license server.	5
Tag Elements	Maximum number of licensed tag elements (external communication points bound to tags). Local tags are always unlimited.	Unlimited
Devices	Maximum number of communication devices the license allows.	256
Subscription Type	Licensing and renewal model.	Perpetual

Property Watch Equivalents

The same capacity limits are exposed at runtime under the **Info.License** object (visible in Property Watch). The Solution Center label and the runtime property refer to the same value:

Solution Center label	Info.License property
Concurrent Users	`Info.License.AllowedRichClients`
Remote License Clients	`Info.License.AllowedRemoteLicenseClients`
Engineering Users	`Info.License.AllowedEngineeringUsers`

License Expiration Warnings

From FrameworX 10.1.6, display clients warn operators about license expiration only in the final week:

Time before expiration	Operators see	Audit trail records
More than 7 days, up to 30 days	No warning	One System Warnings entry per client session: `License expires: <date>. Please contact your software vendor.`

7 days or less	A message box in every client type (Rich Client, Smart Client and HTML5 client): `Your license will expire: <date>.` It appears at client startup and again at each step: 7 days, 3 days, 1 day, 12 hours and 6 hours before expiration, at most once per session for each step.	The same warning, as a System Warnings entry
Maintenance plan expiring within 30 days	No warning	`Maintenance plan expires: <date>. Please contact your software vendor.`

The clients run this check from 08:00 to 17:59 local time. The audit trail entries need **Enable Audit Trail** and **System Warnings** checked in **Alarms Global Settings**. The expiration date is also available at runtime in `Info.License.ExpirationDate`.

> **Changed in FrameworX 10.1.6**
>
> In 10.1.5, every client session shows the license expiration warning to operators, including maintenance plan dates. From 10.1.6, operators see the warning only in the final week before the license expires. To plan renewals earlier, enable System Warnings in the audit trail and review it, or monitor `Info.License.ExpirationDate`.

License Transfer

Computer to Computer

1. Generate SiteCode from original computer
2. Contact vendor for temporary license
3. Install temporary (frees permanent)
4. Generate SiteCode from new computer
5. Receive permanent license for new computer
6. Install on new computer

Virtual Machine Considerations

Maintain consistent VM configuration:

- Network adapters
- CPU configuration
- Memory allocation
- Storage devices

Best Practice: Snapshot VM after licensing

Troubleshooting

Issue	Cause	Solution
Invalid license key	Typing error	Check O/0, I/1 confusion
Activation fails	Network blocked	Use offline activation
License expired	Time-limited	Renew license
Feature not available	Wrong license type	Upgrade license
Dongle not detected	Driver issue	Reinstall drivers
VM license invalid	Hardware changed	Maintain VM configuration
Network license fails	Connection issue	Verify server IP and port
Error applying license: Invalid LicenseKey Access	Security permisson	Execute TWebServices.dll as administrator

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License Files

File	Location	Purpose
SiteCode.txt	User-defined	Request file with machine ID

LicenseKey.lic	User-defined	License certificate
RemoteLicenseService.config	MachineSettings folder	Network license configuration

Best Practices Checklist

- Document serial numbers and expiration dates
- Plan renewals 30 days ahead
- Test restore procedures for VMs
- Monitor floating license usage

In this section...