



## CET W/32 Network License Manager Installation Guide

### Introduction

The CET W/32 Application Builder Compiler and Runtime systems may be authorized for use by a number of authentication methods. These include:

- CET W/32 KeyPlug Authorization
- CET W/32 MAC Address Authorization
- CET W/32 Network License Manager Authorization

This document addresses the Network License Manager Authorization, its installation and use.

### The W/32 Network KeyPlug

W/32 applications may be run on a network by installing a single-user KeyPlug on each workstation using the applications or by installing a W/32 Network KeyPlug on one of the networked computers. The W/32 Network KeyPlug is a special CET KeyPlug that has been programmed for a network with a specific number of concurrent users.

The computer upon which W/32 Network KeyPlug is installed is referred to as the *CET Network KeyPlug Server*. This may be an actual network server, or any workstation that will be left on as long as there are active users on the system. The CET Network KeyPlug Server must be running Windows NT or Windows 95.

The W/32 Network System uses a **CET Network License Manager** or **NLM** program called CETKSERV. On Windows NT systems, a second program called CETKSVC.EXE is also used to ensure that CETKSERV is installed as a service. CETKSERV communicates with the W/32 Compiler and W/32 application running on the workstations using the TCP/IP protocol.

Each workstation that will be running the W/32 Compiler or a W/32 application, and the computer designated as the W/32 Network KeyPlug Server must have an (unique) IP address in order to communicate. It is not important what these IP addresses are and, in fact, the workstation IP addresses may be assigned dynamically (by DHCP or an equivalent service). The IP address for the W/32 Network KeyPlug Server must be fixed, as its value must be inserted into the W32APP.W32 file in each workstation.

### Installing The W/32 Network License Manager on Windows NT

The SETUP program for the W/32 App Builder will install CETKSERV.EXE and CETKSVC.EXE into the CETBIN directory (or the equivalent directory that you specify during installation).

To install CETKSERV as an NT service, perform the following command from the NT command prompt:

```
CD \CETBIN  
CETKSVC -i
```

As an NT Service, the W/32 Network License Manager will be started whenever Windows NT is booted. After installing CETKSERV as a service, you must shut down and restart Windows NT at least once.

## Installing The W/32 Network License Manager on Windows 95

The SETUP program for the W/32 App Builder will install CETKSERV.EXE and CETKSVC.EXE into the CETBIN directory (or the equivalent directory that you specify during installation).

The easiest way to start up CETKSERV is to include this program into the StartUp group. To do this, you must mouse-click from the Start Bar to Settings to Task Bar. Then choose Start Menu Programs, then Advanced. Expand the Programs icon so that you can see Startup and open the folder. Now right-click in the left area and choose New Shortcut. Browse for \CETBIN\CETKSERV.EXE and OPEN. You can rename the shortcut or leave it as CETKSERV.EXE.

## Installing W/32 Network License Manager Authorization on Each Workstation

You must use the SETUP program for the W/32 App Builder (either Compiler or Runtime systems) to install all necessary files on each workstation. Each workstation which will use the W/32 Network License Manager for authorization must have authorization information in the local W32APP.W32 file. The environment variable items that must be in W32APP.W32 at each workstation include:

B\_NETKEY=<IP address of W/32 Network License Manager server>

B\_LICENSE=<license code supplied by CET>

B\_AUTHCODE=<license code supplied by CET>

Your CET dealer will supply the required B\_LICENSE and B\_AUTHCODE strings for your product. For each of the environment variables B\_LICENSE and B\_AUTHCODE there will be one string for a compiler authorization, and one string for a runtime authorization. When you are finished editing a workstation's W32APP.W32, it will contain lines which look like this:

```
B_NETKEY=132.146.177.17
```

```
B_LICENSE=0049-6469-d2c7-09c7,0049-6569-d2c7-09c6
```

```
B_AUTHCODE=0000-0004-06a3-0580,0000-0004-06a2-0581
```

In this example, the IP address of the Network License Manager's server is 132.146.177.17. The values for B\_LICENSE and B\_AUTHCODE were supplied with the CET W/32 product.

## Output from CETKSERV

When CETKSERV is started, it opens a text window to report its progress. The first information that you see will look like:

```
CET BASIC Network License manager 1.1 beta
Copyright (C) CET Software Inc 1997. All rights reserved.
ffff9313 Jan 14 14:45:57 Licensed product: W/32 Ver 9.XX Compiler
ffff9313 Jan 14 14:45:57 Users number: 20
ffff9313 Jan 14 14:45:57 Licensed product: W/32 Ver 9.XX Runtime
ffff9313 Jan 14 14:45:57 Users number: 20
Serial number 521
ffff9313 Jan 14 14:45:57 Creating connector for TCP endpoint 0.0.0.0:5678
ffff9313 Jan 14 14:45:57 Listening for incoming requests...
```

If your Network License Manager is authorized for Compiler use, you will see the line which indicates this. If your Network License Manager is authorized for Runtime use, you will see the line which indicates this. Other useful information includes the number of authorized concurrently executing users, and the serial number of the Network License Manager itself.

When you invoke the W/32 compiler (OBW32), the W/32 Runtime (RUNW32), or a W/32 application from a workstation that is using NLM authorization, information about the authorization will appear on the NLM screen, for example:

```
ffffa2a43 Jan 14 14:52:05 Server TCP endpoint 192.168.10.6:11798
ffffa2a43 Jan 14 14:52:05 Connected to TCP endpoint 192.168.10.6:22789
ffffa2a43 Jan 14 14:52:05 User request received
ffffa2a43 Jan 14 14:52:05 User identification: W/32 Compiler 9.30e SN: 9999-521
ffffa2a43 Jan 14 14:52:05 User request received
ffffa2a43 Jan 14 14:52:05 License request for product 130
ffffa2a43 Jan 14 14:52:05 License request granted, total 19 licenses left
ffffa2a43 Jan 14 14:52:05 Server error
ffffa2a43 Jan 14 14:52:05 End connection to TCP endpoint 192.168.10.6:22789
ffffa2a43 Jan 14 14:52:05 Release license for product 130
```

You can minimize this text screen if you do not wish to see these transactions constantly.