

ADMINS Installation "Cookbook"

Server/Standalone System

1. Load (unzip or download or copy) the ADMINS bin folder (ADMINS EXEs and other resources)

RESULT: you have ADMINS executables and messages available

2. Get Lock Manager going
 - a. Install, set-up, and start the Lock Manager Service (see [ADMINS Win32 Lock Manager Service](#))
 - b. Run ADMSYSPARAM with the default settings (see [AdmSysParam utility](#))

RESULT: lock manager running as a service

3. Get the name of the computer running the lock manager server, so that client machines can be told where the lock manager server is running.

type **gethost** at the DOS prompt

RESULT: returns name of node running lock manager server from two different registry locations - so you can tell the client where the server is running. If the two names are spelled differently (case DOES NOT matter - its OK if one is uppercase and the other lowercase) then special steps need to be taken as the computer's local ID does not match its TCP/IP network identification.

Client (any Client including the server running the lock manager itself)

1. Put location of ADMINS EXEs in path (advanced system settings/environment)

RESULT:When you call ADMINS executables, Windows will know where to find them

2. run admvalidate and set the name of the node running the lock manager via the server host option (from Server step 3 above). See [the admvalidate instructions](#)
OR
set the logical name ADM_SERVER_HOST to point to the name of the system that is running the lock manager, e.g.

```
admlcr adm__server_host ourserver
```

RESULT: client knows where server is

3. assign path to ADMINS Distribution directory to the logical name adm_dist e.g.

```
admlcr -td adm_dist X:\admins\bin
```

RESULT: admins images can find message files

4. At this point you should be able to check logical names e.g. adm!sh

RESULT: should give you listings (maybe empty listings) of the process, desktop, and system logical name tables. An error when attempting to list the system logical name table indicates that the client cannot make contact with the lock manager server (which also controls the system logical name table). Make sure the lock manager server is installed and running on the server you have designated in Client step 2 above. Make sure the name you have used is the same name reported when you run gethost on the lock manager server node.

5. You need to set up an ADMINS-system wide "share" logical name table in order for clients to be able to use ADMINS data files from "shared folders" hosted on another node. This "share" logical name table is also controlled by the lock manager server, and allows ADMINS to uniquely and consistently identify each data file, even though it may be accessed by various share/child folder combinations that all point at the same folder and data file.

Example: If the directory C:\MyApp\Data on the computer MARS is made available under the share name \\MARS\AppData, create an entry in the ADMINS Share Table to reflect this. This is done by the Administrator using the AdmLcr tool:

```
AdmLcr -sh \\MARS\AppData \\MARS\C:\MyApp\Data
```

Use the other logical name commands (adm!sh adm!tr adm!dl) as well with the /SH switch to query and maintain the ADMINS Share Table.

RESULT: Clients can access ADMINS data files from "shares".

ADMINS Lock Manager

Clients

Note that all ADMINS client executables (e.g. AdmTrans, AdmMaint etc.) need the location of the ADMINS lock manager process they are to communicate with. If AdmValidate has not been used to set ADM_SERVER_HOST in the registry of a client system (see AdmValidate in the Manual) then the logical name **ADM_SERVER_HOST** should be assigned in the desktop (or process) table to identify which machine the service is running on. Run **GetComputerName** (or **GetHost**) on the computer where you run the ADMINS Lock Manager service to get the correct spelling of the name of the server, and create the following logical names on all desktops that will run ADMINS:

```
AdmLcr -td ADM_SERVER_HOST computername_where_server_runs
```

```
AdmLcr -td ADM_DIST "C:\Program Files\ADMINS\bin"
```

ADMINS Executables use the value of ADM_DIST to identify the "ADMINS Distribution folder" - where to look for various ADMINS resources such as diagnostic messages

E.g

```
admlcr adm_dist \\Ourserver\ADMINS\bin
```

if the ADMINS distribution files are found in the bin folder inside the shared folder ADMINS on the computer named Ourserver.

Server

The **ADMINS Lock Manager** runs as a service.

To install the ADMINS Win32 Lock Manager, open a console (DOS) window, and run **AdmSvc.exe** in the ADM_DIST (ADMINS Distribution) directory.

```
>admltr adm_dist           !get value of the logical
c:\admins\v84\bin
>cd \admins\v84\bin       !cd to the value
>AdmSvc -install         !run admsvc with install option
```

This will make the service known to the Service Control Manager program.

Now click on **Start/Administrative Tools/Services**. Right-click the **ADMINS Win32 Lock Manager** entry and then click on Properties.

Choose "Automatic (Delayed Start)" for startup type and specify Logon as "Local System Account" - then click OK.

Right-click on **ADMINS Win32 Lock Manager** again and click **Start**

The service will keep running when you log off, and will start automatically when you reboot.

AdmSysParam: Configure KeepAlive Settings for TCP/IP

The **AdmSysParam** utility provides an easy way to check and configure “KeepAlive” parameter settings for TCP/IP on the computer that is running the ADMINS Lock Manager Server^[1]. The parameters that AdmSysParam manipulates should be set to enable the ADMINS Lock Manager Server to quickly detect when a client process holding file and record locks has lost its connection^[2], so that the server can free up those locks. The three parameters that AdmSysParam manipulates are described in the following table:

Parameter	Description	(Default) Value set by “AdmSysParam /d”
KeepAliveTime	Controls how often TCP attempts to verify that an idle connection is still intact.	30,000 milliseconds (30 seconds)
KeepAliveInterval	Interval separating KeepAlive retransmissions	5,000 milliseconds (5 seconds)
TcpMaxDataRetransmissions	Number of KeepAlive retransmissions to attempt (before connection is aborted)	5 retransmissions

By default, (if KeepAlive parameters are not set via AdmSysParam or by some other means) TCP/IP’s KeepAlive time is two hours. With that setting, if a client process holding a file lock lost its connection (for example, because the client PC was shut off or lost its network connection) the ADMINS Lock Manager process would not free the locks for the disconnected process for two hours.

AdmSysParam should be run to configure KeepAlive parameters on any Windows NT/2000/XP processor that is being used to run the ADMINS lock manager server (ADMSVC.EXE). If AdmSysParam is run with the “/d” switch it will set the KeepAlive parameters (see table above) so that locks held by processes that have lost their connections are freed up in less than a minute.

After AdmSysParam runs, the system should be re-booted so that the new parameter settings can take effect.

AdmSysParam usage^[3]:

```

AdmSysParam                will list current settings (if any),
                             and display this help

AdmSysParam /d            to set default values, which are:
                             KeepAliveInterval      = 5000
                             KeepAliveTime          = 30000
                             TcpMaxDataRetransmissions = 5

AdmSysParam /h            to get this help

AdmSysParam /l            to list current settings

AdmSysParam /i=#         to change KeepAliveInterval      to #
                             /t=# to change KeepAliveTime          to #
                             /r=# to change TcpMaxDataRetransmissions to #
                             Be aware that if any of these parameters

```

are absent, the default values will be used.

Examples of use:

Show current KeepAlive settings

```
PROMPT> admsysparam
```

Set “ADMINS-recommended” values for KeepAlive parameters.

```
PROMPT> admsysparam /d
```

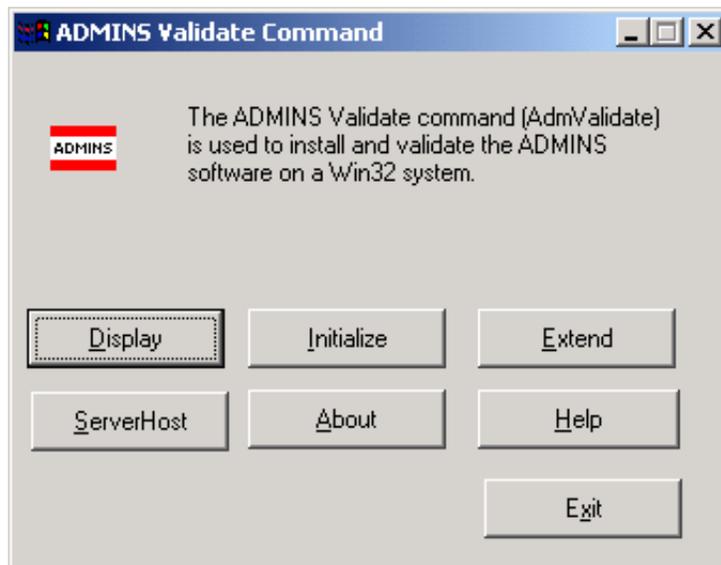
[1] AdmSysParam only needs to be run on the computer that will be running the ADMINS Lock Manager Service(ADMSVC.EXE). It does not need to be run on computers that are running “standalone ADMINS”, or computers that are running ADMINS client programs such as AdmTrans or AdmReport, but are communicating with a lock manager service running on another computer.

[2] Lost connections that would need to be detected via KeepAlive are unusual, unexpected, and uncontrolled events, not normal, expected, and controlled events such as exiting AdmTRANS or even terminating AdmTrans via the Task Manager. Two examples of circumstances that would cause lost connections that KeepAlive would be needed to detect are: unexpected power-down of the client computer, and breaking the physical network connection.

[3] The values explicitly set using /i and /t are in milliseconds.

A typical ADMINS installation consists of a server computer running the ADMINS Lock Manager service, and a number of client computers running the ADMINS client software (e.g. TRANS, MAINT etc).

The ADMINS **AdmValidate** command is used to permanently install the ADMINS software on the server. If an ADMINS installation is not verified by running the **AdmValidate** command, all ADMINS images will time out 3 months after their build date.

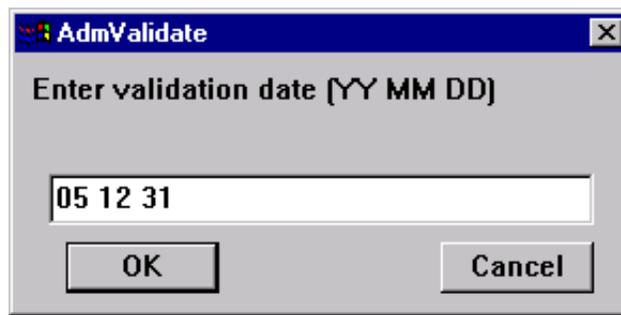


Before **AdmValidate** is run, a normal ADMINS Installation Procedure has to be run, and the ADMINS Win32 Lock Manager service should be running on the server.

The **Display** button will show the current license information:

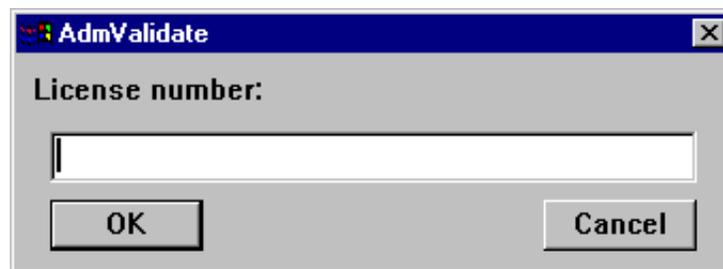


To install the software, or to extend the termination date of an installation, use the **Initialize** button. You will be prompted for the following information:



A Validation Date is the date when the software will cease to operate. Always enter only two digits for year, e.g. **05 12 31** for December 31, 2005. If it is a trial installation, or a temporary installation awaiting a permanent license number, use an agreed upon date, e.g. 3 months into the future.

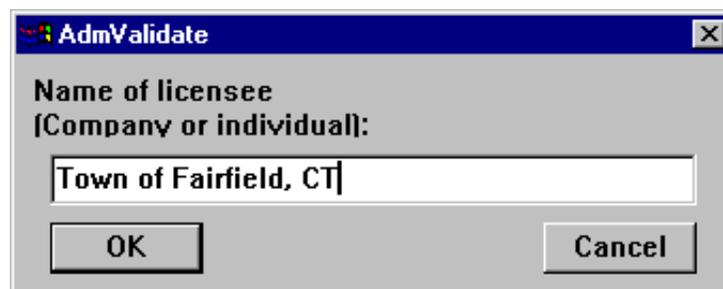
Next you will be prompted for a license number:



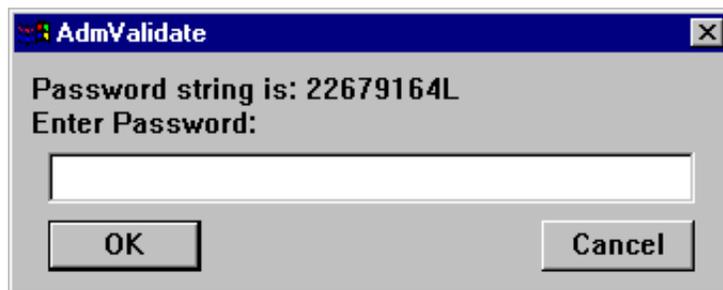
Enter your license number for a permanent installation, or the number of a valid temporary license with the allowed number of concurrent users for a trial or temporary installation.

Then you will be asked to identify the licensee:

Enter the name of your organization (or your own name, if it is a personal installation).



At this point you will be prompted with a unique password string. **You need to be in contact with ADMINS, Inc. to obtain the correct response to this unique string.** Enter the response exactly as given to you by the ADMINS, Inc. representative.



The system will now ask you to verify the license information:

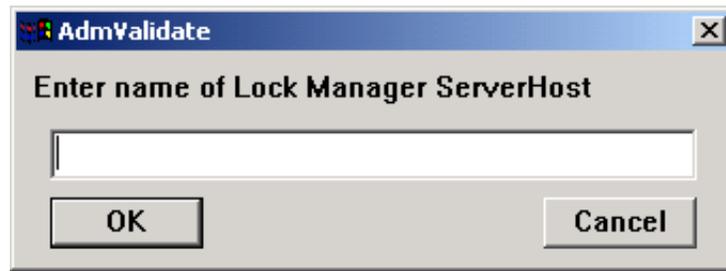


Click on **OK** (or press *Enter*) if the information is OK. AdmValidate will now register your installation as being valid till the termination date shown.

The **Extend** button is used to extend the termination date of a trial or temporary installation once, to give you time to get in contact with ADMINS, Inc. to reach a permanent agreement.



On the **client** computers AdmValidate is used to identify which computer is running the Lock manager service. Click on the **ServerHost** button:



Enter the computer name of the computer where the ADMINS Lock manager is running.