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## Icons

<table>
<thead>
<tr>
<th>Icon</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Caution" /></td>
<td>Caution</td>
</tr>
<tr>
<td><img src="image" alt="Example" /></td>
<td>Example</td>
</tr>
<tr>
<td><img src="image" alt="Note" /></td>
<td>Note</td>
</tr>
<tr>
<td><img src="image" alt="Recommendation" /></td>
<td>Recommendation</td>
</tr>
<tr>
<td><img src="image" alt="Syntax" /></td>
<td>Syntax</td>
</tr>
</tbody>
</table>
SAP License (BC-CST-SL)

This documentation describes the SAP Licensing Procedure [Page 6].
SAP License Procedure

Prerequisites
To use your SAP software legally and in accordance with the contractual stipulations, SAP Systems can only be operated with a license key (license keycode) granted by SAP.

Process Flow
When you install your SAP System, a temporary license is installed. This is valid for four weeks from the date of installation. Before the temporary license expires, you must apply for a permanent license key from SAP. SAP recommends that you do so as soon as possible after you install your system (or transfer the message server to a different host).

This procedure is described in the section entitled Applying for an SAP License [Page 7].

Once you have received your license key from SAP, you can install the license with the transaction SLICENSE or with the saplicense program.

These two license management options are described in the sections:

- License Management from the SAP System (transaction SLICENSE) [Page 10]
  This transaction is available as of Release 4.6C.

- License Management at the Operating System Level (saplicense Program) [Page 17]

License management from the R/3 System with the SLICENSE transaction is simpler and easier to use.
Applying for an SAP License

Use
Your installation is assigned to one SAP software product. A license is granted for exactly one SAP System based on your installation. For your installation number, please contact your contracts department or refer to the delivery note. You can only configure one production system (see System Types [Page 36]) under each installation number.

Prerequisites
You must apply for a separate license for each system.
To determine your license key, we need the following data.

- **Installation number**: 10-digit number assigned by SAP
- **Contact person**: first and surname of the person requesting the license
- **Telephone and fax number**: area code, extension of the person requesting the license
- **System ID**: system name (C11, T11, ...)
- **Software product**: name of the SAP product (R/3, APO, BW, ...)
- **Software product release**: release of the software product
- **Basis release**: release of the underlying SAP Basis software (4.0B, 4.5B, ...)
- **Hardware data**: operating system, licensed database system
- **Reason for the request**: new installation, hardware change, ...
- **Hardware key**: 11-character hardware key of your host computer
- **Type of system**: production, test, (see Appendix: System Types [Page 36])

Procedure
Determine your hardware key [Page 12] and then request your SAP license key [Page 8].
For information on license keys with a limited validity period, please refer to License Key Validity [Page 9].
Requesting an SAP License Key

Procedure
You can apply for a license key directly via SAPNet (Web or R/3 Frontend).

Requests via the SAPNet - Web Frontend
To call up the initial page for requesting license keys, enter
http://sapnet.sap.com/licensekey. This page contains general information on license
keys (for example, documentation on installing the license key in your system) and a link to an
online license key request form.

Requests via the SAPNet - R/3 Frontend
Choose Registration → System → Request license key. An overview of your installations is then
displayed.

You can display a description of the relevant procedure and further information by clicking the
pushbutton or calling up note no. 94998.

Choose your installation and request a new license key by clicking New key. Check your data
and add any necessary information. Choose Request key.

Your license key will be available online within three working days. The overview of your system
landscape will be updated automatically. You can also request a reply by fax.

If you do not have access to SAPNet, please use the fax form supplied with your software
package.

Requesting a License by Fax
Fill out the form completely and send it to the specified fax number.

Provided that you have entered all of the required information on the form, you will receive the
24-character license key by fax from SAP within 3 working days.

Result
You now have all the data you need and can proceed to install [Page 14] the license in your
system.

Keep the license key in a safe place. By doing so, you can reinstall the license if you
delete it by mistake.

Please also refer to the information on License Key Validity [Page 9].
Validity of the SAP License Key

SAP customers with rental or purchase contracts receive an unlimited license key for their systems. SAP customers with demonstration or test contracts receive a temporary license key that is valid for the agreed test period. A new license key must be applied for when this period expires.

Once the license key expires or changes are made to your hardware platform, the standard license is no longer valid. In this case, you can install a temporary SAP license using the transaction SLICENSE (or the `saplicense -temp` program). You can then continue to work with this temporary license key (which is valid for four weeks). During this time, you must apply for and install a new license key.

You can check the validity of your license by logging onto the SAP System and reading the Copyright or by choosing System → Status → SAP system data.

Please send information on systems that have been shut down or deleted in writing to SAP (note 94998). You can request a form to be sent to you by fax by creating a message to this effect under the component "XX-SER-SWFL-LIC".
License Management from the SAP System (Transaction SLICENSE)

Use

From Release 4.6C onwards, you can also manage your licenses with the transaction SLICENSE. Here, you can use all of the functions provided by the saplicense program at the operating system level directly from the system itself. Even if you have not installed a license yet, you can log on as the sap* or work with a temporary license, which is installed automatically when you install or upgrade your system.

![SAP Lizenzverwaltung](image_url)
The sap* user is not authorized to delete licenses!

**Integration**

You can also perform the functions of the SLICENSE transaction at the operating system level on the host running the message server by executing the saplicense [Page 17] program.

**Prerequisites**

You are logged onto the SAP System and are authorized to use this transaction (authorization object S_ADMI_FCD=SLIC).

**Features**

You can use this transaction to

- Display all of the installed licenses (initial screen; the licenses currently in use are highlighted on the screen)
- Install a new (temporary) SAP license [Page 14]
- Delete an installed SAP license [Page 16]
- Determine the hardware key of any host in the system (Determining the Hardware Key [Page 12])

**Activities**

Enter the transaction code SLICENSE.
Determining the Hardware Key

Use

You can use the transaction SLICENSE to determine the hardware key on all computers to which an RFC connection is maintained. `saplicense -get` is then executed on the computer in question and the result is returned.

Prerequisites

You are in the initial screen of the SLICENSE transaction.

Procedure

Press the button in the menu bar or choose Goto → Get hardware key. The following popup is displayed:

All of the computers that are maintained as RFC destinations in transaction SM59 are listed here. The highlighted computers are the servers that belong to the same SAP System (these are also displayed in the Overview of SAP Application Servers [Ext.] SM51).
Determining the Hardware Key

You can determine several hardware keys here - for example, for those computers on which you want the message server to run (for example, for failover configurations).

**Result**

The hardware keys are stored in the 'Alternative Hardware Keys' lists. You can then cut and paste the required hardware key when you install your SAP license.
Installing the SAP License

Use

You can install a new SAP license in your SAP System using the SLICENSE transaction. Once it has been installed, the license key is activated immediately.

Prerequisites

You are in the initial screen of the SLICENSE transaction. You have received the license key for your installation from SAP.

Procedure

To install a license, choose \(\text{安装} \). The following popup is displayed:

![License Popup]

Enter the installation number, hardware key, expiration date, and license key that you received from SAP. Then choose \(\text{安装} \) to install the license.

Temporary License

In the following cases, you may need to install a temporary license while you wait for the license you applied for from SAP:

- Changes to the hardware configuration of the computer running the message server. The hardware key of the computer can also change.
- If you have moved the message server to a different host.
- The license has expired. You can use the temporary license to extend the expiration date by 4 weeks.

To install a temporary license, choose \(\text{安装} \). You do not need to make any additional inputs. Your temporary license is then valid for 4 weeks.

Under certain circumstances, the temporary license might be rejected by the system (please refer to the section entitled Rejection of a Temporary License [Page 30]).
Check

Then check whether you can log onto the SAP System.
Once you have done so, choose System → Status.
Check whether the following SAP system data matches the data you just entered:
Installation number
License expiration date
If you can log on and the data is correct, you have successfully installed the license.

Result

The (temporary) license is installed and displayed in the list of licenses. The license is activated straight away.
Deleting an SAP License

Use
You can delete licenses that are no longer required (for example, because the host to which this hardware key belongs is no longer used).

You will need to delete a license, for example, if the SAP System was built from a copy of another SAP system.

Prerequisites
You are in the initial screen of the SLICENSE transaction and have displayed a list of installed licenses.

Please refer to the section on Deleting SAP Licenses [Page 29]!

Procedure
Choose the licenses you want to delete in the list.
From the menu, choose Edit → Delete license

Result
The selected license is deleted.
License Management at the OS Level (saplicense Program)

Use

The **saplicense** program is used to set up, monitor, and maintain the SAP licenses in your SAP System. The program is stored in the directory `/usr/sap/<SAPSID>/SYS/exe/run`. (On AS/400 systems, the program is stored in the kernel library.)

**Windows NT:**
Replace the slash (/) in all path names with a backslash (\).

When you launch **saplicense** from the operating system level without any options, all of the options are displayed automatically.

Prerequisites

- The database interface library is linked dynamically as of Release 4.5A. For **saplicense** to find this library, the following variables must be set in the environment of the user calling **saplicense**:
  - `dbms_type = <database type>` (for example, `ora`, `inf`, `ada`, `mss`, `db2`, `db4`, `db6`)
  - `DIR_LIBRARY = <path to dynamically linked database library>` (for example, `/usr/sap/SID/SYS/exe/run`)

- User for **saplicense**:
  - **NT and UNIX**
    You must be logged on as the `<sapid>adm` user. This ensures that all of the required environment variables are set correctly.
  - **AS/400**
    You must be logged on as the `<SID>OFR` user.

    The executable library R3<REL>OPT must be contained in the library list.

Features

**AS/400 only:**

For the AS/400, the argument must be placed in quotation marks, for example, `-help`, `-get`, `-temp`.

The **saplicense** program features the following options.

<table>
<thead>
<tr>
<th>Option</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>-delete</td>
<td>Delete [Page 27] installed license</td>
</tr>
<tr>
<td>-get</td>
<td>Determine hardware key [Page 19]</td>
</tr>
</tbody>
</table>
## License Management at the OS Level (saplicense Program)

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>-help [option]</td>
<td>Display help for selected option (get, install, temp, show or test).</td>
</tr>
<tr>
<td>-install [ifile=&lt;filename&gt;]</td>
<td>Install SAP license [Page 20]. The optional parameter ifile=&lt;filename&gt; (or IFILE=&lt;filename&gt;) can be used to import the license data from the installation file.</td>
</tr>
<tr>
<td>-number</td>
<td>Output installation number</td>
</tr>
<tr>
<td>-show</td>
<td>Display all installed licenses</td>
</tr>
<tr>
<td>-temp</td>
<td>Install temporary SAP license [Page 24]</td>
</tr>
<tr>
<td>-test</td>
<td>Test whether a valid SAP license is installed (SAP System must be started), see also Test SAP License [Page 25]</td>
</tr>
<tr>
<td>-version</td>
<td>Display version number of the saplicense program</td>
</tr>
</tbody>
</table>
Determining the Hardware Key

Procedure

1. Determine which host is running the message server by taking a look at the `rdisp/mshost` parameter in the profile `/usr/sap/<SAPSID>/SYS/profile/DEFAULT.PFL`. This parameter specifies the host on which the message server is started.

   `rdisp/mshost =hs0011`

   In this example, the message server is started on the host hs0011.

2. Log on as `<sapsid>adm` (AS/400: `<SID>OFR`) to the host running the message server at the operating system level.

3. Use the command `.saplicense -get` (AS/400: `saplicense -get`) to determine the 11-character hardware key of the host.

4. Next, request an SAP license key [Page 8].

The hardware key (customer key) depends on the host on which your database server is installed. Start "`saplicense -get`" on the host on which your database server is installed.
Installing the SAP License

Prerequisites

The license you received through SAPNet or by fax from SAP. This contains the installation data as well as the 24-character license key.

⚠️ Are you using an SAP System with Release 3.0B or older? If so, please refer to the Notes for SAP Systems Up to Release 3.0B [Page 23].

Procedure

You can enter the license data manually or import the license from a license key file. If you are using an SAP Release after 4.5A, you must enter this data manually.

Entering the License Data Manually

1. Log on as <sapsid>adm (Unix and NT) or <SID>OFR (AS/400) to the computer running the message server of your SAP System. This is usually the machine on which the central instance of the SAP System is running.

2. Call up saplicense -install (AS/400: saplicense 'install'). The system then prompts you to enter the following data:
   - System name (SID)
   - Hardware key
   - Installation number
   - License expiration date
   - License key

⚠️ If you are entering the data manually, make sure that you enter the key correctly. Do not mistake 0 (zero) for the upper-case O, for example. License keys never contain zeros - it must always be the upper-case letter O.

Entering your license data manually - example:

Specify your sap system name:
SAP SYSTEM NAME = PRD

Specify your hardware key:
HARDWARE KEY = D1889390344

Specify your installation number:
INSTALLATION NO = 0005500021

Specify your expiration date:
EXPIRATION_DATE [YYYYMMDD] = 99991231
Specify your license key:
LICENSE_KEY   1...5....0....5....0...4
LICENSE_KEY = 9KJDYITLVLPRZS9WXVS8SNTN
saplicense: License successfully installed

Releases prior to 4.6C use the old term customer key for hardware key.

Importing the License from a File

1. Display the license key in SAPNet. Create a (script) file by downloading it from SAPNet or by cutting and pasting the script to a local file on your computer.

2. Log on as <sapsid>adm (Unix and NT) or <SID>OFR (AS/400) to the computer running the message server of your SAP System. This is usually the machine on which the central instance of the SAP System is running.

3. Call up saplicense -install ifile=<filename> (AS/400: saplicense 'install ifile=<filename>'). Enter the name of the file you created in step 1 as the <filename>.

Example of an SAP license key file:
#
SAPSYSTEM=C11
HARDWARE-KEY=A0123456789
INSTNO=0123456789
EXPIRATION=99991231
LKEY=012345678901234567891234
#

Releases prior to 4.6C use the old term customer key for hardware key.

Result

The license is now installed and activated.
Check whether you can log onto the SAP System.
Once you have done so, choose System → Status.
Check whether the following SAP system data matches the data you just entered:
Installation number
License expiration date
If you can log on and the data is correct, you have successfully installed the license.

⚠️

Make sure that you have not made any typing errors. If you receive an error message after you have installed the license, please refer to the section entitled FAQs Regarding the SAP License [Page 33].
Installing the SAP License
Notes for SAP Systems up to Release 3.0B

You do not need to enter the hardware key (customer key) and system name.

In the final step, initialize your system with the `saplicense -check` program.

A detailed syntax description of the saplicense programs is provided in the Installation/Upgrade Guide and in the SAP Online Help. If you experience problems installing the key, please submit a problem message under the component `XX-SER-SWFL-LIC`. 
Installing a Temporary SAP License

Use

In the following cases, you may need to install a temporary license while you wait for the license you applied for from SAP:

- Changes to the hardware configuration of the computer running the message server. The hardware key of the computer can also change.
- If you have moved the message server to a different host.
- The license has expired. You can use the temporary license to extend the expiration date by 4 weeks.

Procedure

1. At the operating system level, log on as <sapsid>adm (Unix and NT) or <SID>OFR (AS/400) to the computer running the central SAP instance.

2. Enter `saplicense -temp` (AS/400: `saplicense '-temp'`).

   Enter the SAP System ID when requested to do so.

   The following message indicates that you have successfully installed the temporary license:

   `saplicense: Temporary license successfully installed`

   ⚠️

   In some cases, you might not be able to install a temporary license. These are described in the section entitled Rejection of a Temporary SAP License [Page 30].
Testing SAP Licenses

If you cannot log onto your SAP System, you can use the saplicense option `-test pf=<Profile>` (AS/400: `-test pf=<Profile>' ) for troubleshooting purposes.

When you call up this option, the saplicense program determines the hardware key of the message server, simulates a logon to the SAP System, and carries out the necessary license check. You can follow all of these steps on the screen.

1. At the operating system level, log on as `<sapsid>adm` (Unix and NT) or `<SID>OFR` (AS/400) to the computer running the central SAP instance.
2. UNIX and AS/400: start your SAP System and the database with `startsap`.
   NT: start your SAP System and the database with the SAP Service Manager.
3. Call up saplicense as follows:
   UNIX and NT: `saplicense -test pf=<Profile>`
   AS/400: `saplicense '-test pf=<Profile>'`

   You must enter the profile file. Specify the profile file (with the complete path) of the SAP System you want to test.

   For an SAP System with the name PRD (instance number 00) on the host `sapr3`, you would enter the following:

   UNIX and NT: `saplicense -test pf=/usr/sap/PRD/SYS/profile/sapr3_PRD_DVEBMGS00`
   AS/400: `saplicense '-test pf=/usr/sap/PRD/SYS/profile/sapr3_PRD_DVEBMGS00'`

   The following message indicates that the test was successfully completed:

   `test result: license test ok`

   The following message specifies the license used for the test:

   `LICENSE system: PRD hardware key: D1889390344`
   `expiration_date: 99991231`
   `installation no: 0005500021 key: 9KJDYITLVPRZ9WXVS8SNTN`
   `productid: R3_ORA`

   If you receive an error message during the license check, you can use the data output by the program to determine the cause of the error. (Connection setup to the message server, connection to database, and so on). Depending on the message, check whether the message server is running, or whether the database has started, and so on.

   You can use the `TRACE=2` option to carry out a detailed error analysis. The command syntax is as follows:

   `saplicense -test pf=<Profile> TRACE=2`

   saplicense then creates the file `dev_slic` in the current directory. This file contains detailed error messages.
Deleting an SAP License

Use

Old licenses that are no longer required can be deleted to enhance the performance of the license check and maintain an overview of the system landscape.

⚠️

Please refer to the section entitled Deleting SAP Licenses [Page 29]!

💡

You only have to delete a license if the installation number changes, since the system ID is assigned to precisely one installation number and is checked.

Procedure

1. Log on as <sapsid>adm (Unix and NT) or <SID>OFR (AS/400) to the computer running the central SAP instance at the operating system level.

2. First display the licenses that are currently installed. To do so, enter saplicense -show (AS/400: saplicense -show).

   saplicense lists all licenses and their status.

   LICENSE system: TST hardware key: TEMPLICENSE
   expiration_date: 19960202
   installation no:...  key:...
   product ID: R3_ORA
   *** license useable ***

   LICENSE system: TST hardware key: D1889390344
   expiration_date: 99991231
   installation no:...  key:...
   product ID: R3_ORA
   *** license useable ***

   LICENSE system: PRD hardware key: TEMPLICENSE
   expiration_date: 19960131
   installation no:...  key:...
   product ID: R3_ORA
   *** license useable ***

   LICENSE system: PRD hardware key: D9566626666
   expiration_date: 99991231
   installation no:...  key:...
   product ID: R3_ORA
   *** license useable ***

In the above example, you can see that 4 licenses (2 have been applied for and 2 are temporary licenses) are installed in the SAP System. Under the SAP system names, notice that 2 licenses have been installed for the system TST and 2 for the system PRD. This could be the case if the SAP System TST was copied to the name PRD and an
Deleting an SAP License

applied license was then installed for the copied system PRD. The old licenses for the TST system still exist.

These old licenses cannot be used in the new system and, therefore, can be deleted.

3. Delete the licenses with saplicense -delete (AS/400: saplicense '-delete') as follows:
   a. First enter the SAP System ID. saplicense then asks you for the hardware key (11-character hardware key).
   b. Enter the hardware key or TEMPLICENSE.
   c. Enter the relevant product ID for your SAP System.

The licenses are then deleted. This is confirmed by the message: saplicense: license deleted

⚠️ Please make sure to read the section on Deleting SAP Licenses [Page 29]!
Deleting SAP Licenses

- Never delete "old" licenses if you do not have an active license. `saplicense -temp` needs these to decide whether a temporary license can be installed (see Rejection of a Temporary SAP License [Page 30]).

- You should never delete the license that is currently active (this is highlighted in the SLICENSE transaction)! If you want to do so, you should first install a (temporary) license so that other users can log onto the system.

- The license status is not checked when you delete a license. In particular, the system does not check whether you are deleting a license that is currently in use. Once you delete a valid license that is currently in use, no additional users will be able to log onto the system from this point on (exception: user `sap*`). Users who are currently logged on, however, can continue to work.

  If you inadvertently delete a valid license that is currently in use, you can reinstall it at any time with `saplicense -install` (AS/400: `saplicense '-install'`), provided that you have kept your license key.

- Old licenses that are no longer used do not affect the operation of your SAP System. Nevertheless, it is advisable to delete licenses that are no longer used. (Enhances the performance of the license check.)

Deleting temporary licenses (CUSTOMER KEY = TEMPLICENSE) does **not** mean that you can install additional temporary licenses (see also Installing Temporary SAP Licenses [Page 24] and Rejection of a Temporary SAP License [Page 30]).
Rejection of a Temporary SAP License

In some cases, you cannot install a temporary license:

- A temporary license can only be set up if a valid license was applied for recently (in the last 3 weeks).
  
  The following message indicates that a temporary license cannot be installed because the date of the last successful license check is longer than 3 weeks ago:

  saplicense: Temporary license NOT installed, *** Old license older than 4 weeks

- If the SAP System is built from a copy of an existing SAP System, a temporary license cannot be installed initially.

  Apply for a license before you are about to work with a copied SAP System.
Shutting Down SAP Systems

Use
For licensing reasons, SAP requires complete details in writing on systems that have been shut down. You can obtain a form for this purpose from the SAP SAPNet - R/3 Frontend.

Procedure
From your Inbox, choose General Functions – Service – Maintain system data and select the relevant installation. Select the system to be shut down and choose the Delete system button.

Please enter your telephone and fax numbers on the overview displayed, check your entries in the system overview, and choose the Create fax button to print out a form on your local printer.

Fill out this form and send it to the specified fax number at SAP.

⚠️

Please note:
the form is processed automatically. Manual changes and additions will be ignored.

If you have any questions, please create a message in the Online Service System (component XX-SER-SWFL-LIC).
High Availability Configurations

The licensing procedure enables you to install several licenses at once. This is necessary, for example, for the following configurations:

- Oracle parallel server mode
- Cluster environment comprising computers with standby hosts which can be activated in the case of a failure ("high availability" strategy)

If standby hosts are defined for the message server (or SAP System) in high availability configurations, a license must be installed for each one. You can determine the hardware key (customer key) of the standby host by calling up `saplicense -get` (AS/400: `saplicense '-get'`) on the computer.
FAQs Regarding the SAP License

The following is a list of frequently asked questions regarding the SAP license.

- What does the following message mean when the license is installed?
  
  `saplicense: License not installed, *** Wrong license data specified`

  You have probably made a typing error when entering one of the values. Make sure that you enter the upper/lower-case letters correctly.

  In many cases, the digit 0 (zero) is mistaken for the upper-case letter O.

  ![Lightbulb]

  License keys never contain zeros - it must always be the upper-case letter O.

  On some terminals, the Backspace key is not set correctly. Try to avoid using this key.

  ![Lightbulb]

  Try to cut and paste the license data, instead of typing it in directly.

- You do not need to stop and restart your SAP System to install the license. Once it has been installed, the license is activated immediately.

- The following SAP notes in the SAPNet - R/3 Frontend might help you to solve any problems you encounter with the SAP license.

<table>
<thead>
<tr>
<th>Note number</th>
<th>Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>0013743</td>
<td>No valid license installed; no logon</td>
</tr>
<tr>
<td>0014838</td>
<td>No valid license after hardware change/upgrade</td>
</tr>
<tr>
<td>0084465</td>
<td>Problem with saplicense during the upgrade</td>
</tr>
<tr>
<td>0111563</td>
<td>saplicense cannot delete index</td>
</tr>
<tr>
<td>0125752</td>
<td>saplicense -get on DEC-UNIX gives no key</td>
</tr>
<tr>
<td>0147720</td>
<td>RC 99 when installing the license</td>
</tr>
<tr>
<td>0174911</td>
<td>Formation of the customer key (HW key)</td>
</tr>
<tr>
<td>0193800</td>
<td>saplicense: Trace functions</td>
</tr>
<tr>
<td>0068255</td>
<td>SAP license key invalid after AIX upgrade</td>
</tr>
<tr>
<td>0012809</td>
<td>How to install license</td>
</tr>
<tr>
<td>0131162</td>
<td>Installation number is INITIAL</td>
</tr>
<tr>
<td>0094998</td>
<td>Request license key for system/delete system</td>
</tr>
</tbody>
</table>

- Test the licenses as described under Testing the SAP License [Page 25]. This may help you locate the source of the problem. You can also create a trace file with detailed information by using `saplicense -test pf=<Profile> TRACE=2`.

- If problems arise in conjunction with the license that cannot be solved using the above notes, please submit an error message in the SAPNet - R/3 Frontend, component BC-CST-SL. If
FAQs Regarding the SAP License

you have any questions with regard to licensing, please specify the component XX-SER-SWFL-LIC.

💡

In most cases, saplicense –show and a trace file are necessary to solve the problem. You can expedite the problem solving procedure by including this with your message. If you have any problems creating the trace file, please refer to note 0193800.
Appendix

The appendix to this documentation contains background information on the following subjects:

- **System types [Page 36]**
  What are the different types of SAP System?

- **Limited validity of the license key [Page 37]**
  What are the reasons for a limited license key?

- **saplicense program - commands [Page 39]**
  A brief overview of the options for the **saplicense** program on UNIX/Windows NT as well as the AS/400.
System Types

The following types of SAP System exist.

**TEST: Test system**
A system that is used for prototyping and testing system settings and processes.

**PROD: Production system**
A system in which the real-life business processes of a company are mapped and in which real-time data is recorded.

**IDES**
A system that is used exclusively for the SAP International Demonstration and Education System. IDES uses a model company to describe common business process and explain how they are mapped in the SAP System.

**DEMO: Demonstration system**
A system that is used exclusively for internal employee training or presentations for interested parties.

**DEVELOP: Development system**
A system in which inhouse developments and Customizing settings are made.

**TRAIN: Training system**
A system that is used to teach system settings and processes.

**BACKUP**
A separate backup system for a (live) system.
Backup systems were used previously to map high-availability configurations [Page 32]. Since December 1999, high availability configurations can be mapped correctly by requesting several license keys for one system. See also note 181543.
SAP License Keys with Limited Validity

If the license key you requested is only valid for a limited period of time, this can be due to a number of reasons. You can find out the actual reason for this by displaying the system data in SAPNet.

The various reasons and what to do in each case are explained below.

- **Number of licensed systems exceeded**

  According to the conditions of the license agreement, only the number of systems defined in the contract can be licensed on this installation. Only one of these systems can be used as a production system.

  Please check whether the system overview in the initial screen matches your current system landscape:

  If this is the case, please release a new installation from your SAP Contracts Department. Then request a new, unlimited license key under the new installation number.

  If the system overview does **not** match your current system landscape, please correct the system assignment for the installation in the system data maintenance (path: General functions → Service → Maintain system data). Then request a new, unlimited license key under this installation for the existing system.

- **Max. one production system licensed per installation**

  As stipulated by the license agreement, a maximum of one system in each installation can be used as a production system. A production system has already been released for this installation.

  Please check whether the system overview in the initial screen matches your current system landscape:

  If this is the case, please release a new installation from your SAP Contracts Department. Then request a new, unlimited license key under the new installation number.

  If the system overview does **not** match your current system landscape, please correct the system information in the system data maintenance (path: General functions → Service → Maintain system data). Then request a new, unlimited license key under this installation for the existing system.

- **Limited master data**

  The licenses for the operating system and/or database are limited pursuant to the contractual agreement.

  Please check your information and inform your SAP Contracts Department.

  Once the system data has been corrected, please request a new, unlimited license key for this system.

- **Unlicensed system data**

  The system data of the license key request (database and/or operating system) does not match the system data defined in the license agreement.
SAP License Keys with Limited Validity

Please check your information and inform your SAP Contracts Department of any changes made to the system data.

Once the system data has been corrected, please request a new, unlimited license key for this system.

- **Software product not licensed**

  Your installation is assigned to a specific SAP software product. The systems in the installation, therefore, can only be released for the licensed software product.

  Please check your information and inform your SAP Contracts Department of any changes made to the system data.

  Once the system data has been corrected, please request a new, unlimited license key for this system.

- **Your contract with SAP is only valid for a limited period of time**

  Please contact your SAP Contracts Department. Once the contract data has been changed, please request a new, unlimited license key for this system.

- **No production system defined in the contract**

  According to the license agreement (demonstration or training license), a production system cannot be licensed for this installation, because use in production operation or preparations to this effect are not permitted.

  Please contact your SAP Contracts Department.

- **Limited license key requested**

  You have requested a limited license key for your system. If you require an unlimited license key, please request a new, unlimited license key for the same system in this installation.
saplicense Program - Commands

The following section provides an overview of the commands used by the saplicense program.

UNIX and NT

<table>
<thead>
<tr>
<th>Option used to start saplicense</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>-help</td>
<td>Display help text.</td>
</tr>
<tr>
<td>-version</td>
<td>Display version number of the saplicense program</td>
</tr>
<tr>
<td>-install [ifile=&lt;filename&gt;]</td>
<td>Installing the SAP License. &lt;filename&gt; is the name of the license key file (script), which you can create in SAPNet (from Basis Release 4.5A).</td>
</tr>
<tr>
<td>-get</td>
<td>Output the hardware key.</td>
</tr>
<tr>
<td>-temp</td>
<td>Install a temporary SAP License.</td>
</tr>
<tr>
<td>-show</td>
<td>Display all installed licenses.</td>
</tr>
<tr>
<td>-delete</td>
<td>Delete installed license.</td>
</tr>
<tr>
<td>-test</td>
<td>Test whether the current SAP license is valid.</td>
</tr>
</tbody>
</table>

AS/400

<table>
<thead>
<tr>
<th>Option used to start saplicense</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>*HELP</td>
<td>Display help text.</td>
</tr>
<tr>
<td>*DSPVSN</td>
<td>Display version number of the saplicense program.</td>
</tr>
<tr>
<td>*INSLICKEY</td>
<td>Install the SAP License.</td>
</tr>
<tr>
<td>*GETKEY</td>
<td>Output the hardware key.</td>
</tr>
<tr>
<td>*INSTMPKEY</td>
<td>Install a temporary SAP License.</td>
</tr>
<tr>
<td>*DSPSTS</td>
<td>Display all installed licenses.</td>
</tr>
<tr>
<td>*DLTLICKEY</td>
<td>Delete installed license.</td>
</tr>
<tr>
<td>*TEST</td>
<td>Test whether the current SAP license is valid.</td>
</tr>
</tbody>
</table>

The AS/400 options were modified from SAP Release 3.11/4.0B onwards.

For the AS/400, the argument must be placed in quotation marks, for example, '-help', '-get', '-temp'.