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Overview of License Keys

What are Licenses and Feature Keys

Some IP Office applications and devices require the entry of licenses before they will work. They may also use licenses to enable certain features and control the number of supported users, ports or channels.

- **Example 1: Enabling Software**
  Phone Manager software is provided free with IP Office, however the same software can run in Pro mode which gives the user access to additional features. If a user is set to run Phone Manager Pro when no license is available, their software operates as Phone Manager Lite. If a license is available, their software works as Phone Manager Pro.

- **Example 2: Enabling Software and Features**
  The CCC application is initially enabled by one license which allows 1 supervisor, 5 call center agents and 1 PC wallboard. Additional license keys may be entered to enable support for additional agents, supervisors and/or PC wallboards.

**Licenses**

License keys are also known as RFA (Remote Feature Activation) codes. These are entered into the IP Office system's configuration. Each license is a unique 32-character string based on:

- The Serial Number printed on the IP Office Feature Key dongle.
- The feature and software being enabled.

**Feature Keys**

The Feature Key is a hardware device used to validate the licenses installed on an IP Office system. Each IP Office using licenses requires its own Feature Key.

- **Serial Feature Key Dongle**
  Plugs directly into the serial port on IP Office Small Office Edition, IP406 V2 and IP412 Control Units, allowing PC-less operation.

- **Parallel Port Feature Key Dongle**
  Plugs into a Feature Key server PC connected to the IP Office.

- **USB Feature Key Dongle**
  Plugs into a Feature Key server PC connected to the IP Office.
How License & Feature Keys Work

There are two methods of operation:

1. **PC-Less Operation Using a Serial Port Feature Key**
   - The advantage of this method is that a permanent PC is not required.
   - A serial port Feature Key dongle is plugged into the serial port of the IP Office Small Office Edition, IP406 V2 and IP412 Control Units.
   - The address for the License Server IP Address set in the IP Office's configuration should be blank.
   - Following a reboot the IP Office control unit validates its licenses directly against the serial port Feature Key dongle.

2. **Using a Feature Key Server PC and Parallel or USB Feature Key**
   - This method requires a permanent PC.
   - The IP Office Feature Key Server application is installed onto a PC on the IP Office LAN.
   - The Feature Key dongle is attached to that PC's parallel port or USB port.
   - The address of that PC is set in the IP Office's configuration (System | System | License Server IP Address).
     - Note: This requires the PC to be given a fixed IP address.
   - Following a reboot, the IP Office control unit then validates its licenses via the Feature Key server application.
The Feature Key Server Application
Not applicable if using a Serial Port Feature Key dongle.

The Feature Key Server software is required when using a USB or parallel port feature key. It is installed on a Windows PC connected to the IP Office via the LAN. The Feature Key dongle is then attached to that PC's USB or parallel port.

When a License Key is issued, it is entered into the Manager application and uploaded to the IP Office. This causes the IP Office to reboot. During the reboot, the IP Office attempts to connect to the PC running the Feature Key Server software.

When connected it checks the License Keys it has against the serial number of the Feature Key found on the Feature Key Server PC. If okay then the status each license is changed to 'valid'.

Notes:
1. Each Feature Key Server PC will only support License Key validation for one IP Office. If you have more than one IP Office then you will require a Feature Key Server for each.
2. If a PC is logged on as a different user, it may be necessary to re-install the Feature Key software.

Obtaining License Keys
The exact method for obtaining License Keys will depend on your business relationship with Avaya, for example you may have to obtain your License Keys via a distributor or reseller.
Current License Keys
This section lists the licenses that currently exist. It uses the license names as shown in the Manager Application.

Note that existence of a license does not imply that the related product is available in all territories. Product availability must be confirmed with your IP Office product supplier.

CCC Licenses
- **CCC Server**
  Enables the CCC Server application (Archiver and Wallboard Manager) with support for 1 supervisor, reporting on 5 agents, and one PC Wallboard.

- **CCC Agents**
  Enables various numbers of additional agents (5, 10, 20, 50) for CCC reporting.

- **CCC PC Wallboards**
  Enables additional CCC PC Wallboards for 5, 10, 20, 50 users.

- **CCC Spectrum Wallboards**
  Enables the operation of between 4 and 16 Spectrum wallboards (not Ferrograph) with CCC. One license per 4 wallboards.

- **CCC Supervisors**
  Enables CCC (CCV and Report Viewer) for 2, 3, 4 or 5 supervisors; allowing reporting on 5 agents each plus one instance each of a PC Wallboard.

- **CCC Designer (users)**
  Enables CCC Report Designer, which permits a supervisor to design and customize their own reports. One license per user.

- **CCC Agent Rostering**
  Enables the Agent Rostering Interface for CCC which provides connection to a 3rd party Agent Rostering package (Blue Pumpkin).

- **CCC EMail**
  Enables the MultiMedia component of CCC V4. Enables email routing and reporting, outbound calling and web call-me buttons. Requires IP400 CTI.

- **CCC Chat**
  Multi Media component CCC V4 enables Web Chat. Requires IP400 CTI Pro or CCC email plus CTI Pro licenses.

- **MS-CRM Integration**
  Allows operation between IP Office and MS-CRM server and clients.

CTI
- **CTI Link Pro**
  Enables CTI Link Pro functionality (TAPI Link Pro & DEVLink Pro). Also enables four TAPI WAV Voice Processing Ports.

- **Wave User**
  Allows streaming of WAV files, using TAPI Link Pro, for 3rd party voice applications. This is a per user license. Note that TAPI WAV calls use system data channels taken from the same pools as used for voicemail ports. The maximum number of simultaneous TAPI WAV user calls and voicemail users is determined by the IP Office control unit type; IP401 = 2, IP403 & Small Office Edition = 10, IP406 = 20, IP412 = 30.
Voicemail

- **Voicemail Pro (4 ports)**
  Enables Voicemail Pro plus 4 ports (2 maximum on IP401).

- **Additional Voicemail Pro (ports)**
  Adds (2, 4, 8 or 16 ports) to the existing number of VM Pro ports, up to the maximum number of ports supported by the IP Office control unit type. IP401 = 2, IP403 & Small Office Edition = 10, IP406= 20, IP412 = 30.

- **Integrated Messaging**
  Enables IMS Pro operation with Voicemail Pro. Enables synchronization to MS Exchange email systems and adds a form to control Voice Mails within Outlook. Requires Voice Mail Pro.

- **Audix / Modular Messaging Voicemail**
  Enables IP Office to use a remote Intuity Audix or Modular Messaging for voicemail. Does not require a local Voice Mail Pro server.

- **VMPro Database Interface**
  Enables 3rd party database support within Voicemail Pro call flows.

- **VMPro TTS (Generic)**
  Enables use of text to speech facilities using third party TTS software with Voicemail Pro. One license per simultaneous instance of TTS usage.

- **VMPro TTS (Scansoft)**
  Enables use of text to speech facilities using Avaya supplied TTS software with Voicemail Pro. One license per simultaneous instance of TTS usage.

- **VMPro VB Script**
  Enables VB Script functionality with Voicemail Pro.

- **Networked Messaging**
  Enables VPNM (Voicemail Pro Networked Messaging) functionality within Voicemail Pro. This allows message exchange with remote Voicemail Pro and Avaya Interchange systems.

- **VMPro Recordings Administrator**
  Enables integration between Voicemail Pro VRL and the Avaya Contact Store for IP Office application.

Phone Manager

- **Phone Manager Pro (per user)**
  Enables Phone Manager Pro for 1, 5, 10, 20, 50, 100 or unlimited users. The user's Phone Manager mode is set through the IP Office configuration (**User | Telephony | Phone Manager Type**).

- **Phone Manager Pro IP Audio Enabled (per user)**
  Enables Phone Manager Pro IP softphone operation. Note: Also requires a Phone Manager Pro license.
Other Licenses

- **DECT Integration (ports)**
  Enables enhanced DECT integration (CTI app for extra functionality), e.g. twinning of DECT handsets with desktop telephones, access to directories, etc.

- **Compact Business Center**
  Enables the CBC application for one user.

- **SoftConsole (users)**
  Adds one SoftConsole user. A maximum of four SoftConsole user can be licensed.

- **IP End-Points**
  Controls the number of 3rd party endpoints H323 VoIP devices (1, 5, 10, 20, 50 or 100).
    - Note: This license is not required for Avaya 4600 series telephones which do not require a license. Nor is this license required for IP enabled Phone Manager Pro as this is licensed separately.

- **Conferencing Center**
  Enables the IP Office Conferencing Center application.

- **Small Office WiFi**
  Enables the Wireless Card on Small Office.

- **IPSec Tunnelling**
  Enables the use of IPSec security measures
Feature Key Installation

Installation Requirements

Software

- The IP Office Administration CD contains the Feature Key Server software.

Feature Key

- Ensure that the serial number on the Feature Key dongle is noted and recorded in a safe location. The number is printed on the Feature Key dongle and prefixed with SN.

Feature Key Server PC

Only required if using a Parallel Port or USB Feature Key. Not applicable if using a Serial Port Feature Key dongle.

- Windows 95 or higher.
  - Windows NT4, 2000 or XP are strongly recommended as the Feature Key Server is then able to install as a service, giving greater reliability.

- Windows 2000 or XP is required if using a USB Feature key.

- The server PC should be located in a secure area. The Feature Key device is fundamental to the correct operation of many features, so a record of its location and serial number must be kept.

- Parallel Port Feature Key:
  - A 25-pin Parallel port 1, set to bidirectional operation in the PC’s BIOS.
  - Bidirectional parallel port operation is the normal default on most PCs.
  - **WARNING:** Do not connect a printer to the parallel port Feature Key dongle. Poorly wired printer cables or printers that have not been earthed correctly can cause the parallel port Feature Key to stop working.

- USB Feature Key:
  - USB 1.1 or 2.0. Type A connector.
  - IP Office 1.4 Admin suite or later.

Network

- The PC should be configured and tested for TCP/IP networking.

- It should be on the same network segment as the IP Office. That is data traffic between the IP Office and the Feature Key Server PC should not require routing.

- The PC should have a fixed IP address. Whilst PC’s in a DHCP network usually retain the same IP address between reboots this is not guaranteed.
  - If the IP Office is acting as a DHCP server, then in default it uses addresses 192.168.42.2 to 192.168.42.201 for DHCP clients. This leaves addresses between 192.168.42.202 and 192.168.42.254 free for devices that require fixed IP addresses.
Serial Port Feature Key Installation

1. Plug the serial port Feature Key dongle into the serial port on the IP Office control unit (IP Office Small Office Edition, IP406 V2 and IP412 control units).

2. Start Manager and click [ ] to load the IP Office system’s configuration.

3. Double-click on [ ] System in the left-hand panel.

4. On the System tab, the License Server IP Address field is used to set the location of the feature key.

5. For a serial port license key, set the License Server IP Address to be blank.

6. Click OK.

7. Click on [ ] License in the left-hand panel. Any existing license should appear in the right-hand panel.

8. To add a license, double-click on the right-hand panel. Enter the new license into the menu that appears and click OK.

9. The Status of the new license should show Unknown and name the license as expected. If its Status is Unknown and name Invalid, the most likely cause is incorrect entry of the license key characters.
   - To edit the license key double-click it.
   - To remove a license key, right-click it and select Delete.

10. Click on [ ] to send the configuration back to the IP Office. The menu that appears will indicate whether a reboot is required.
Parallel Port / USB Feature Key Installation

1. Plug the Feature Key dongle into the PC's parallel or USB port.
2. Insert the IP Office Administrator Applications CD and let the installation wizard auto-start.
3. If some IP Office administrator application have been previously installed, select Modify when the Modify, Repair or Remove option menu appears.
4. In the Select Features menu, ensure that Feature Key Server is checked. Do not uncheck any other options as this will trigger there removal if already installed.
5. Having installed the software, the system will reboot.
   - If installed on a Windows 95/98/ME PC, the Feature Key Server installs a shortcut link in the PC's StartUp folder so that is runs whenever the PC is started.
   - If installed on a Windows NT/2000/XP PC, the Feature Key Server installs itself as a service. It appears as Key Server in the Services Panel.
   - In the Add/Remove Programs panel, an entry Sentinel System Driver appears. This is part of the Feature Key Server.
6. Following installation and reboot, the Feature Key Server appears as an icon in the Windows System Tray.
   - Right-click on the icon and select About to display the server software version and the Feature Key device number.
   - If the icon appears as a white block with a red cross through it, then there is some error. The most likely error is that the Feature Key is missing from the parallel or USB port.
7. Start Manager and click to load the IP Office system's configuration.
8. Double-click on System in the left-hand panel.
9. On the System tab, the License Server IP Address field is used to set the location of the feature key.
10. The default is a 255.255.255.255 broadcast address. This is okay for many sites, but it is recommend that the IP address of the PC running the Feature Key Server is entered.
11. Click OK.
12. Click on License in the left-hand panel. Any existing license should appear in the right-hand panel.
13. To add a license, double-click on the right-hand panel. Enter the new license into the menu that appears and click **OK**.

14. The **Status** of the new license should show **Unknown** and name the license as expected. If its **Status** is **Unknown** and name **Invalid**, the most likely cause is incorrect entry of the license key characters.

   - To edit the license key double-click it.
   - To remove a license key, right-click it and select **Delete**.

15. Click on **Send** to send the configuration back to the IP Office. The menu that appears will indicate whether a reboot is required.
Backing-up/Restoring License Keys
In theory the following events could halt the validation of License Keys:

- **IP Office Failure:**
  If this occurs, the License Keys (and rest of the configuration) can be restored from the backup copy of the configuration saved following previous license key changes (see Entering License Keys).

- **Feature Key Server PC Failure:**
  If this occurs, the Feature Key can simply be installed on a new PC and the Feature Key Server software installed from the Admin CD. If the new PC has a different IP address check the License Key Server Address in the Manager application.

- **Feature Key Failure:**
  This is an extremely rare occurrence. If it does occur, a replacement Feature Key device and new set of License Keys will be required. These can be obtained from the same source as the original Feature Key device.
    - **Note:** In order to avoid being charged for the replacement license keys you will have to return the original Feature Key device.
Glossary

D
Dongle: A physical device attached to a system against which license keys are validated.

L
Licence Key: A 32-character string that is unique to the feature being activated and to the serial number of the Feature Key dongle.

R
RFA: Remote Feature Activation code. An alternate name for a license key.
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