Abstract
This guide provides information about installing HPE iLO license keys.
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HPE iLO License Key Installation Instructions

License installation methods

You can use the following methods to install a license:

- Entering the 25-digit alphanumeric license key (aka 5x5 key) in iLO using a browser
- Using XML scripting
- Using the iLO CLI
- Using the RESTful API
- Using iLO Federation group licensing

Prerequisites

Procedure

- The Configure iLO Settings privilege
- A license activation key
- The license is supported on the server on which you want to install it.

Entering the 25-digit alphanumeric license key (aka 5x5 key) in iLO using a browser

Procedure

1. Locate your license activation key.
2. Log in to iLO and navigate to the Administration > Licensing page.

   ![Image of iLO Licensing page]

   **NOTE:** Once you enter your activation key in this window, all that will display of it is the last five digits. Record and save your license key somewhere else before you enter it here.

3. On the Licensing page, enter the license key in the Activation Key box.
To move between segments, press the Tab key or click inside a segment of the Activation Key box. The cursor advances automatically when you enter data into the segments of the Activation Key box.

4. Click Install.

The EULA confirmation page opens.

4. Click Install.

The EULA confirmation page opens.

Confirm EULA

You must read and accept the End User License Agreement ("EULA") included with the iLO License Pack to activate these advanced features. This EULA grants Licensee rights to license the advanced features ONLY if the installation keys are Authorized Copies as defined in the EULA. Except as expressly provided in the EULA regarding use of such Authorized Copies, nothing shall be construed as granting any other rights to Licensee. Click the button to acknowledge that you have read and agree to the terms and conditions of the iLO License Pack End User License Agreement.

I agree

5. Review the EULA confirmation details, and click OK.

Using XML scripting

You can use XML commands and an advanced scripting interface to install your licenses. This method is useful when you want to roll out license keys as part of a large-scale server deployment. Scripts are XML files written for a scripting language called RIBCL. The following methods are available:

- **Recommended method**: HPQLOCFG (HP Lights-Out Configuration Utility)—A utility that replaces the previous HP Lights-Out Configuration Utility (CPQLOCFG). This utility is a Windows command-line utility that sends XML configuration and control scripts over the network to iLO.

  **NOTE**: The HPQLOCFG (HP Lights-Out Configuration Utility) has the same command formatting as the CPQLOCFG utility.

- HPONCFG (HP Lights-Out Online Configuration Utility)—A local online scripted setup utility that runs on the host and passes RIBCL scripts to the local iLO. This utility requires the HPE ProLiant iLO 3 or 4 Channel Interface Driver.

- LOCFG (Lights-Out Configuration Utility)—A custom iLO scripting environment that includes a Perl sample you can use to send RIBCL scripts to iLO over the network.
NOTE: Because the HPONCFG and LOCFG utilities run on the server itself, you do not need to enter the server IP address, FQDN, or login credentials when using either of those utilities. All other commands for installing a single-server license are the same for all utilities.

For more information, see:

- The HPE iLO 5 Scripting and Command-Line Guide
- How to Install an iLO License Key Through Scripting

Sample license XML script

```xml
<RIBCL VERSION="2.0">
<LOGIN PASSWORD="password" USER_LOGIN="adminname">
<RIB_INFO MODE="write">
<LICENSE>
<ACTIVATE KEY="11223-34455-66778-89900-AABBC"/>
</LICENSE>
</RIB_INFO>
</LOGIN>
</RIBCL>
```

Recommended procedure: Installing a single license using HPQLOCFG (HP Lights-Out Configuration Utility)

Procedure

1. Locate your license activation key.
2. Go to [www.hpe.com/support/ilo4](http://www.hpe.com/support/ilo4) and download the latest utility.
3. Locate the folder in which your utility is installed.
4. Move the License.xml file into the same folder as the utility.
5. Open a command prompt, navigate to the folder containing the utility and XML file, and open the XML file.
6. Do one of the following:

   - To execute the generic script without modifying it:
     ```
     UtilityName.exe -s IPAddress/fqdn -f xmlFileName.xml -l logfile.txt -u username -p password -t KEY="KEY"
     ```
     **Example**
     ```
     hpqlocfg.exe -s mydl360server.mydomain.com -f License.xml -l mylogfile.txt -u adminaccount -p myadminpass123 -t KEY="abcde-fghij-klmno-pqrst-uvwxy"
     ```
   
   - To modify the License.xml file:
     a. Enter the login information for the system on which you are installing the license.
For example: <LOGIN PASSWORD="myAdminPass123" USER_LOGIN="adminAccount">

b. Enter the license key you purchased.

<ACTIVATE KEY="abcde-fghij-klmno-pqrst-uvwxy"/>

c. Save the changes to your file, and then execute as follows. To specify verbose (detailed) output, add the -v tag.

UtilityName.exe -s IPAddress/fqdn -f xmlFileName.xml -l logfile.txt -v

Example

hpqlocfg.exe -s mydl360server.mydomain.com -f License.xml -l mylogfile.txt -v

Sample output

When the non-verbose form of the command is successful, no output is displayed.

Verbose output looks similar to the following.

<?xml version="1.0"?>
<RIBCL VERSION="2.23">
<RESPONSE
  STATUS="0x0000"
  MESSAGE='No error' />
</RIBCL>

Installing a single license using (HP Lights-Out Online Configuration Utility) or LOCFG (Lights-Out Configuration Utility)

Procedure

1. Locate your license activation key.
2. Go to http://www.hpe.com/support/iLO5 and download the latest utility.
3. Locate the folder in which your utility is installed.
4. Move the License.xml file into the same folder as the utility.
5. Open a command prompt, navigate to the folder containing the utility and XML file, and open the XML file.
6. At the command prompt, do one of the following:
   • To execute the generic script without modifying it:
UtilityName.exe -f xmlFileName.xml -l logfile.txt

Example
hponcfg.exe -f License.xml -l mylogfile.txt

• To modify the License.xml file:
  
a. Enter the license key you purchased.
     <ACTIVATE KEY="abcde-fghij-klmno-pqrst-uvwxy"/>
  
b. Save the changes to your file, and then execute as follows. To specify verbose (detailed) output, you can add the -v tag.
     UtilityName.exe -f xmlFileName.xml -l logfile.txt
     Example
     hponcfg.exe -f License.xml -l mylogfile.txt

Using the iLO CLI

Procedure

1. Open a connection in an SSH client application, such as PuTTY.
2. Leave the SSH port as 22, and the Connection type as SSH.
3. At the login prompt, enter your user name and password.
   The hpiLO-> prompt appears.
4. To navigate to the license page, enter cd map1/oemhp_license1, and then enter show.
   The license information is displayed, including the license type (oemhp_name1), and the license key that is partially redacted for security reasons.
5. To add a license, replace KEY with your 5X5 license key in the following command:
   oemhp_licenseinstall KEY
   Valid formats for entering a license key are:
   • oemhp_licenseinstall “AAAAA-BBBBB-CCCCC-DDDDD-EEEEE”
   • oemhp_licenseinstall AAAAA-BBBBB-CCCCC-DDDDD-EEEEE
   • oemhp_licenseinstall AAAAAABBBBBCCCCCDDDDDEEEEE
   • oemhp_licenseinstall “AAAAABBBBBCCCCCDDDDDEEEEE”

   The following output is displayed:
   • status=0
   • status_tag=COMMAND COMPLETED
   • New license key installed
Using the RESTful Interface Tool

Procedure

1. Locate your license activation key.
2. Download the RESTful Interface Tool (Windows MSI package, or Linux RPM package) from https://hewlettpackard.github.io/python-redfish-utility/.
3. Locate the folder in which you specified the utility to install.
4. Move the License.json file into the same folder as the utility.
   Sample license JSON script:
   ```json
   {
     "body": {
       "LicenseKey": "XXXXX-XXXXX-XXXXX-XXXXX-XXXXX"
     },
     "path": "/rest/v1/managers/1/LicenseService"
   }
   ```
5. Open a command prompt, navigate to the folder containing the utility and JSON file, and open the JSON file.
6. Replace the default (invalid) license key with your valid key.
7. Save the changes to your file, and execute the RESTful command as follows:
   ```
   ilorest.exe rawpost license.json --url mydl360server.mydomain.com -u adminaccount -p myadminpass123
   ```
8. If the command is successful, a message stating that The resource has been created successfully appears.

For more information, see Managing Hewlett Packard Enterprise Servers Using the RESTful API.

Using iLO Federation group licensing

You can use iLO Federation, a licensed feature, to manage your iLO license keys. The iLO Federation Group Licensing page displays the license status for iLO Federation group members, and you can use the Group Licensing page to activate iLO licensed features within a configured group.

Consider the following when you use iLO Federation group licensing feature to install a license in these scenarios:

- On the servers in an iLO Federation group, each member of the group must have the Configure iLO Settings privilege.
- On multiple servers, you must use a key that is authorized for the number of selected servers.
- On a server that already has a key installed, the new key replaces the current key. If you do not want to replace existing licenses, click Unlicensed in the License Information Status table to install licenses only on servers that are unlicensed.

For more information, see the HPE iLO Federation User Guide.
## Verifying license installation

<table>
<thead>
<tr>
<th>√</th>
<th>Verify:</th>
</tr>
</thead>
<tbody>
<tr>
<td>No installation error messages are displayed.</td>
<td></td>
</tr>
<tr>
<td>You can view information about your installed licenses.</td>
<td></td>
</tr>
</tbody>
</table>
Websites

General websites
Hewlett Packard Enterprise Information Library
www.hpe.com/info/EIL
Single Point of Connectivity Knowledge (SPOCK) Storage compatibility matrix
www.hpe.com/storage/spock
Storage white papers and analyst reports
www.hpe.com/storage/whitepapers

For additional websites, see Support and other resources.
Support and other resources

Accessing Hewlett Packard Enterprise Support

- For live assistance, go to the Contact Hewlett Packard Enterprise Worldwide website:
  http://www.hpe.com/assistance

- To access documentation and support services, go to the Hewlett Packard Enterprise Support Center website:
  http://www.hpe.com/support/hpesc

Information to collect

- Technical support registration number (if applicable)
- Product name, model or version, and serial number
- Operating system name and version
- Firmware version
- Error messages
- Product-specific reports and logs
- Add-on products or components
- Third-party products or components

Accessing updates

- Some software products provide a mechanism for accessing software updates through the product interface. Review your product documentation to identify the recommended software update method.

- To download product updates:
  Hewlett Packard Enterprise Support Center
  www.hpe.com/support/hpesc
  Hewlett Packard Enterprise Support Center: Software downloads
  www.hpe.com/support/downloads
  Software Depot
  www.hpe.com/support/softwaredepot

- To subscribe to eNewsletters and alerts:
  www.hpe.com/support/e-updates

- To view and update your entitlements, and to link your contracts and warranties with your profile, go to the Hewlett Packard Enterprise Support Center More Information on Access to Support Materials page:
  www.hpe.com/support/AccessToSupportMaterials
IMPORTANT: Access to some updates might require product entitlement when accessed through the Hewlett Packard Enterprise Support Center. You must have an HPE Passport set up with relevant entitlements.

Customer self repair

Hewlett Packard Enterprise customer self repair (CSR) programs allow you to repair your product. If a CSR part needs to be replaced, it will be shipped directly to you so that you can install it at your convenience. Some parts do not qualify for CSR. Your Hewlett Packard Enterprise authorized service provider will determine whether a repair can be accomplished by CSR.

For more information about CSR, contact your local service provider or go to the CSR website:

http://www.hpe.com/support/selfrepair

Remote support

Remote support is available with supported devices as part of your warranty or contractual support agreement. It provides intelligent event diagnosis, and automatic, secure submission of hardware event notifications to Hewlett Packard Enterprise, which will initiate a fast and accurate resolution based on your product's service level. Hewlett Packard Enterprise strongly recommends that you register your device for remote support.

If your product includes additional remote support details, use search to locate that information.

Remote support and Proactive Care information
HPE Get Connected
www.hpe.com/services/getconnected
HPE Proactive Care services
www.hpe.com/services/proactivecare
HPE Proactive Care service: Supported products list
www.hpe.com/services/proactivecaresupportedproducts
HPE Proactive Care advanced service: Supported products list
www.hpe.com/services/proactivecareadvancedsupportedproducts

Proactive Care customer information
Proactive Care central
www.hpe.com/services/proactivecarecentral
Proactive Care service activation
www.hpe.com/services/proactivecarecentralgetstarted

Warranty information

To view the warranty for your product or to view the Safety and Compliance Information for Server, Storage, Power, Networking, and Rack Products reference document, go to the Enterprise Safety and Compliance website:

www.hpe.com/support/Safety-Compliance-EnterpriseProducts

Additional warranty information
HPE ProLiant and x86 Servers and Options
www.hpe.com/support/ProLiantServers-Warranties
Regulatory information

To view the regulatory information for your product, view the Safety and Compliance Information for Server, Storage, Power, Networking, and Rack Products, available at the Hewlett Packard Enterprise Support Center:

www.hpe.com/support/Safety-Compliance-EnterpriseProducts

Additional regulatory information

Hewlett Packard Enterprise is committed to providing our customers with information about the chemical substances in our products as needed to comply with legal requirements such as REACH (Regulation EC No 1907/2006 of the European Parliament and the Council). A chemical information report for this product can be found at:

www.hpe.com/info/reach

For Hewlett Packard Enterprise product environmental and safety information and compliance data, including RoHS and REACH, see:

www.hpe.com/info/ecodata

For Hewlett Packard Enterprise environmental information, including company programs, product recycling, and energy efficiency, see:

www.hpe.com/info/environment

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