

Let's Encrypt certificate management

- Parallels Remote Application Server 19.0

Description

Parallels Remote Application Server v19 allows to use SSL certificates issued by Let's Encrypt. Let's Encrypt is a global Certificate Authority (CA). This organization is nonprofit and does not charge any fees for their certificates.

Prerequisites

- Publicly accessible domain that resolves to the HALB or Secure Gateway directly or through third-party load balancers.
- Port 80 must be opened on the HALB and Secure Gateway for incoming Let's Encrypt requests.

Configuration

To issue a new Let's Encrypt certificate:

1. In the Parallels RAS Console, navigate to **Farm > Certificates**.
2. Click the **Tasks** drop-down menu and select **Issue Let's Encrypt Certificate**.
3. In opened configuration wizard read **Let's Encrypt EULA**. Confirm your consent by checking **I have read and accept Let's Encrypt EULA** flag.
4. In **Expiration emails** field list specify email addresses that will receive notifications from Let's Encrypt.
5. Optionally, change the time when certificates are renewed automatically in the **Automatically renew certificates before expiration** field.
6. Click OK.
7. Click the **[+]** button to the left of the Tasks drop-down list and choose **Issue Let's Encrypt certificate**.
8. In the Issue Let's Encrypt certificate dialog, specify the following:
 - **Name**: Name of the certificate.
 - **Description**: Description of the certificate.
 - **Usage**: HALB and/or Secure Gateway.
 - **Key size**: Key size.
 - **Country code**: Code of your country.

- **Full state or province:** Name of your state or province.
- **City:** Your city.
- **Organization:** Name of your organization.
- **Organization unit:** Name of your organization unit.
- **E-mail:** Email address of your organization.
- **Common name:** Publicly accessible domain name which can be resolved to the HALB or Secure Gateway directly or through 3rd party load balancers .
- **Alternative names:** Publicly accessible domain names which can be resolved to the HALB or Secure Gateway directly or through 3rd party load balancers.

9. Click **Save**.

To renew a Let's Encrypt certificate:

1. In the RAS Console, navigate to **Farm > Certificates**.
2. Right-click the Let's Encrypt certificate that you want to renew.
3. In the context menu, select **Control > Renew**.

To revoke a Let's Encrypt certificate:

1. In the RAS Console, navigate to **Farm > Certificates**.
2. Right-click the Let's Encrypt certificate that you want to revoke.
3. In the context menu, select **Control > Revoke**.
4. In the **Revoke Certificate** dialog, select the reason why you want to revoke the certificate.
5. Click **Revoke**.

Known Issues and Limitations

- Let's Encrypt provides only Domain Validation Certificates (DV).
- Let's Encrypt uses rate limits as described here: <https://letsencrypt.org/docs/rate-limits/> .

Documentation and References

- Let's Encrypt home page <https://letsencrypt.org/>
- Let's Encrypt - How It Works <https://letsencrypt.org/how-it-works/>
- Let's Encrypt port 80 best Practice <https://letsencrypt.org/docs/allow-port-80/>

