



Customizing Notification of Certificate Expiration

Avi Technical Reference (v21.1)

Customizing Notification of Certificate Expiration

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Avi Vantage enables users to customize when SSL certificate expiry notification is triggered. The system expects a minimum of 3 notification days. By default, the alerts are triggered 30 days, 7 days and 1 day before expiry.

Example

In the below sequence,

1. The Controller's properties are first displayed.
2. Two notification periods (45 days and 14 days) are specified, and
3. Saved into the configuration,
4. At which point the revised Controller properties are displayed as confirmation.

Note that the two dates are automatically inserted and displayed in sequence.

```
[admin:10-10-26-52]: > configure controller properties
Updating an existing object. Currently, the object is:
```

```
+-----+-----+
| Field                               | Value |
+-----+-----+
| uuid                                | global |
| unresponsive_se_reboot              | 300   |
| crashed_se_reboot                    | 900   |
| se_offline_del                       | 172000 |
| vs_se_create_fail                    | 1500  |
| vs_se_vnic_fail                      | 300   |
| vs_se_bootup_fail                    | 300   |
| se_vnic_cooldown                     | 120   |
| vs_se_vnic_ip_fail                   | 120   |
| fatal_error_lease_time               | 120   |
| upgrade_lease_time                   | 360   |
| query_host_fail                      | 180   |
| vnic_op_fail_time                    | 180   |
| dns_refresh_period                   | 60    |
| se_create_timeout                    | 900   |
| max_dead_se_in_grp                   | 1     |
| dead_se_detection_timer              | 360   |
| api_idle_timeout                     | 15    |
| allow_unauthenticated_nodes          | False |
| cluster_ip_gratuitous_arp_period     | 60    |
| vs_key_rotate_period                 | 60    |
| secure_channel_controller_token_timeout | 60    |
| secure_channel_se_token_timeout      | 60    |
| max_seq_vnic_failures                 | 3     |
| vs_awaiting_se_timeout               | 60    |
| vs_apic_scaleout_timeout             | 360   |
```

```

| secure_channel_cleanup_timeout      | 60 |
| attach_ip_retry_interval            | 360 |
| attach_ip_retry_limit                | 4 |
| persistence_key_rotate_period        | 60 |
| allow_unauthenticated_apis           | False |
| warmstart_se_reconnect_wait_time     | 300 |
| vs_se_ping_fail                      | 60 |
| se_failover_attempt_interval         | 300 |
| max_pcap_per_tenant                  | 4 |
| ssl_certificate_expiry_warning_days[1] | 30 days |
| ssl_certificate_expiry_warning_days[2] | 7 days |
| ssl_certificate_expiry_warning_days[3] | 1 days |
| seupgrade_fabric_pool_size           | 20 |
| seupgrade_segroup_min_dead_timeout   | 360 |
+-----+-----+

[admin:10-10-26-52]: controllerproperties> ssl_certificate_expiry_warning_days 45
[admin:10-10-26-52]: controllerproperties> ssl_certificate_expiry_warning_days 14
[admin:10-10-26-52]: controllerproperties> save

+-----+-----+
| Field                                | Value |
+-----+-----+
| uuid                                  | global |
| unresponsive_se_reboot                | 300 |
| crashed_se_reboot                      | 900 |
| se_offline_del                         | 172000 |
| vs_se_create_fail                      | 1500 |
| vs_se_vnic_fail                        | 300 |
| vs_se_bootup_fail                      | 300 |
| se_vnic_cooldown                       | 120 |
| vs_se_vnic_ip_fail                     | 120 |
| fatal_error_lease_time                 | 120 |
| upgrade_lease_time                     | 360 |
| query_host_fail                        | 180 |
| vnic_op_fail_time                      | 180 |
| dns_refresh_period                     | 60 |
| se_create_timeout                       | 900 |
| max_dead_se_in_grp                     | 1 |
| dead_se_detection_timer                 | 360 |
| api_idle_timeout                       | 15 |
| allow_unauthenticated_nodes             | False |
| cluster_ip_gratuitous_arp_period        | 60 |
| vs_key_rotate_period                   | 60 |
| secure_channel_controller_token_timeout | 60 |
| secure_channel_se_token_timeout         | 60 |
| max_seq_vnic_failures                   | 3 |
| vs_awaiting_se_timeout                  | 60 |
| vs_apic_scaleout_timeout                | 360 |
| secure_channel_cleanup_timeout          | 60 |
| attach_ip_retry_interval                 | 360 |

```

```

| attach_ip_retry_limit           | 4 |
| persistence_key_rotate_period  | 60 |
| allow_unauthenticated_apis     | False |
| warmstart_se_reconnect_wait_time | 300 |
| vs_se_ping_fail                | 60 |
| se_failover_attempt_interval   | 300 |
| max_pcap_per_tenant            | 4 |
| ssl_certificate_expiry_warning_days[1] | 45 days |
| ssl_certificate_expiry_warning_days[2] | 30 days |
| ssl_certificate_expiry_warning_days[3] | 14 days |
| ssl_certificate_expiry_warning_days[4] | 7 days |
| ssl_certificate_expiry_warning_days[5] | 1 days |
| seupgrade_fabric_pool_size     | 20 |
| seupgrade_seggroup_min_dead_timeout | 360 |
+-----+-----+

```

To remove any of the `warning_days` entries, execute a sequence such as the below within the `configure` command:

```

[admin:10-10-26-52]: controllerproperties> no ssl_certificate_expiry_warning_days 14
[admin:10-10-26-52]: controllerproperties> no ssl_certificate_expiry_warning_days 1
[admin:10-10-26-52]: controllerproperties> save

```

Note this restriction: Add as many `warning_days` entries as you like. However, when removing them, Avi Vantage will reject any attempt to reduce the number of entries below three.

Automatic Certificate Renewal Timing

If the certificate management profile is configured for automatic certificate renewal, a renewal is attempted just prior to the penultimate notification (in the above example, that would be just prior to the 7-day notification). If the renewal succeeds, the last two notifications are not sent. If the renewal fails, the penultimate notification is sent. Thereafter, if a manual renewal succeeds prior to the last notification, it too is skipped. Otherwise, the final notification will be sent (with no accompanying final attempt to renew).

When a certificate renewal occurs, a new expiration date is set and yet another notification schedule is established per the values within the `ssl_certificate_expiry_warning_days` array in force at the time.

For more information about Avi Vantage's automation of the process for requesting and installing a certificate signed by a certificate authority, refer to [this article](#).