# Service Release Notes

WiNG 5.9.4.2-007R

| IMPORTANT |
| --- |
| Service releases are made available to fix specific customer reported issues in a timely manner. Service releases are not as extensively tested as main releases such as **5.9.4.0-020R**. The next maintenance or manufacturing release will incorporate all qualifying and preceding service releases. |

This document is an addendum to the release notes for the main release 5.9.4.0-020R.

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## Features

### WiNG-XIQ Secure Communication

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This release introduces secure mechanism for WiNG devices to post configuration and periodic statistics to XIQ. The secure and encrypted channel is established by validating server certificate of XIQ by WiNG controllers and access points followed by device level unique username/password-based authentication by XIQ.

**Any WiNG firmware version prior to this feature will continue to establish unsecure communication with XIQ and should be used only in non-production environments only.**

#### Commands

1. Configuring XIQ URL

   WiNG uses existing NSight policy server command for XIQ communication. The same command can be set to XIQ URL va-gcp-wing.extremecloudiq.com.

```
vx9000-8D09E7(config)#nsight-policy CLIENT
vx9000-8D09E7(config-nsight-policy-CLIENT)#show context
nsight-policy CLIENT
 server host 10.234.165.41 https

vx9000-8D09E7(config-nsight-policy-CLIENT)#no server host 10.234.165.41
vx9000-8D09E7(config-nsight-policy-CLIENT)#commit
```

```
vx9000-8D09E7(config-nsight-policy-CLIENT)#server host va-gcp-
wing.extremecloudiq.com https enforce-verification
vx9000-8D09E7(config-nsight-policy-CLIENT)#commit write memory
vx9000-8D09E7(config-nsight-policy-CLIENT)#
```

2. Installing/updating XIQ CA certificate

   This is a new command to install/update XIQ CA certificate on WiNG devices.

```
CORP-WING1# copy xiq-cachain from ?
  URL  Location of CA certificate
       URLs:  tftp://<hostname|IP>[:port]/path/file
              ftp://<user>:<passwd>@<hostname|IP>[:port]/path/file
              sftp://<user>:<passwd>@<hostname|IP>[:port]>/path/file
              http://<hostname|IP>[:port]/path/file
              cf:/path/file
              usb<n>:/path/file
       IPv6 URLs:   tftp://<hostname|[IPv6]>[:port]/path/file
              ftp://<user>:<passwd>@<hostname|[IPv6]>[:port]/path/file
              sftp://<user>:<passwd>@<hostname|[IPv6]>[:port]>/path/file
              http://<hostname|[IPv6]>[:port]/path/file
```

3. Enforcing security and encryption

   The existing configuration command for specifying NSight Server (or XIQ) URL will have additional optional parameter **enforce-verification** in order to trigger certificate validation process.

   - If parameter is not configured, then WiNG device shall try to establish connection with a NSight server using existing mechanism.
   - If parameter is configured, then WiNG device shall try to establish connection with XIQ by validating XIQ certificate and username/password-based authentication.

```
vx9000-8D09E7#show run nsight-policy CLIENT
nsight-policy CLIENT
 server host va-gcp-wing.extremecloudiq.com https enforce-verification
vx9000-8D09E7#
```

# Fixes

Following customer issues/vulnerabilities are fixed.

| ESR/SPR | Description |
|---|---|
| WING-42639 | **Kr00k Vulnerability CVE-2019-15126**<br><br>The vulnerability, tracked as CVE-2019-15126, or "Kr00k" and was disclosed at the RSA 2020 security conference in San Francisco by ESET researchers on Wednesday 2/26.<br><br>Kr00k is a vulnerability that permits attackers to force Wi-Fi systems into dissociative states, granting the opportunity to decrypt packets sent over WPA2 Personal/Enterprise Wi-Fi channels. |

# Platforms Support

Supported in this release,

- WING-XIQ secure communications
  AP6522, RFS4000, NX5500, NX7500, NX9500, NX9600, VX9000

- Kr00k vulnerability fix
  AP7522, AP7532, AP7562, AP8432, AP8533, RFS4000, NX5500, NX7500, NX9500, NX9600, VX9000

Supported last in this release,

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# Notes

This WiNG release is compatible with XIQ release Q1R2 version 20.2.0.3 and above.