LOCAL LICENSE SERVER

Administrator Guide for Windows

ZEBRA

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Introduction

Zebra Technologies' Local License Manager (also referred to as "Server")
Sentinel RMS License Manager is an on-premises network service that enforces and manages licensing in multi-user environment. It keeps track of all the licenses and handles requests from network users who want to run your application, granting authorization to the requester to allow them to run the application, and denying requests when all licenses are in use.
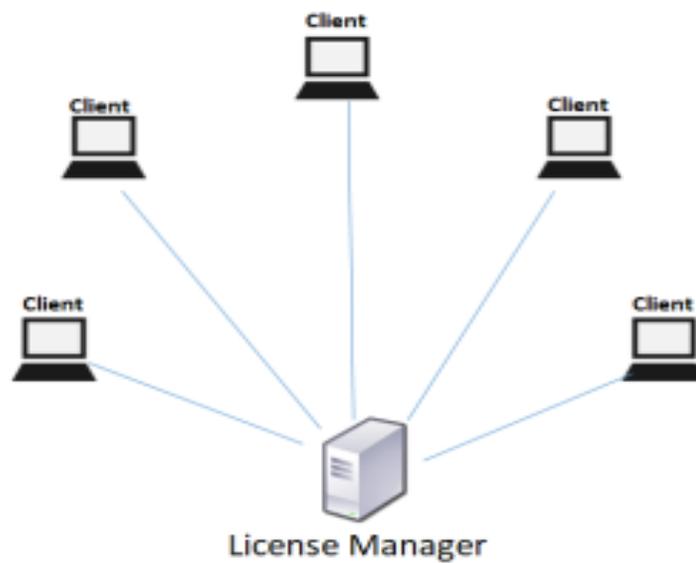
This guide describes how to administer Zebra Technologies' Local License Server.

NOTE: Screens and windows pictured in this guide are samples and can differ from actual screens.

Contact

Please feel free to send your queries on this presentation to ZebraSWLicensingTeam@zebra.com

Getting Started

Local License Server Requirements

Hardware Requirements

Minimum hardware requirements for the license server:

- Hard drive: 500 MB
- RAM: 4 GB
- CPU: 2 GHz, two cores.

Supported Platforms

The Embedded local license server is supported on the following platforms:

- Windows (32-bit binary that is available for both 32-bit and 64-bit).

Default Installation Path

- Windows 32-bit - <Osdrive>:/Program Files/Common Files/Thales/Sentinel RMS License Manager/WinNT
  Do not change default installation path.

Network Port

- 5093
- **NOTE** Sentinel RMS License Manager uses port number 5093 and 5099. Make sure these ports are not blocked by a firewall. Otherwise, it may result in unexpected behavior. These ports are used for license activation on Devices.

Customer License Portal

- https://zebratechnologies.prod.sentinelcloud.com/ecp/

Download Packages

If you require administration of enterprise licenses on a local, on-premise server, please contact the **Zebra Technical Support** help desk to obtain access to the installer.

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Install Local License Manager(LLS)

All Installation steps must be executed using **Administrator Privilege.**

1. Install Sentinel RMS License Manager 10.2.0 executable (Sentinel RMS License Manager 10.2.0.msi) under RMS License Manager folder.

    a. During installation steps, please select installation Type as Complete.

    b. Select checkbox for unlock system firewall settings for RMS License Manager.

    c. Follow installation prompt with default selections until Installation is completed.

2. **[MANDATORY] Execute "update-10.2.0.105-patch.bat" script with Administrator Privilege to patch the RMS License Manager with latest version 10.2.0.105.**

```
Administrator: Command Prompt

E:\LLSInstaller\patch_installer\patch_installer>update-10.2.0.105-patch.bat
[*] Checking for administrative privileges...
-------------------------------------------------
Sentinel RMS Update Service
-------------------------------------------------
[*] Checking file versions...
[CURRENT VERSION] 10.2.0.94
[NEW VERSION    ] 10.2.0.105
[PROCEED] Newer version detected. Starting update...
-------------------------------------------------
[*] Checking service status...
[*] Stopping service: Sentinel RMS License Manager...
The Sentinel RMS License Manager service is stopping.
The Sentinel RMS License Manager service was stopped successfully.

[*] Backing up current file to old.lservnt.exe...
[*] Deploying version 10.2.0.105...
        1 file(s) copied.
[SUCCESS] File replaced.
[*] Starting service: Sentinel RMS License Manager...
The Sentinel RMS License Manager service is starting.
The Sentinel RMS License Manager service was started successfully.

-------------------------------------------------
Update Complete: 10.2.0.94 -> 10.2.0.105
-------------------------------------------------

E:\LLSInstaller\patch_installer\patch_installer>_
```

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Thales Local License Server Components

1. RMS License Manager (Local License Server) Service.

2. SentinelCloudPlugin - Sentinel Cloud Plug-in (SCP) Service.

3. WlmAdmin – Administration Application for RMS License Manager.

4. WlsGrMgr – Application to manage Reservations.

Zebra RMS WlmAdmin

WlmAdmin displays information about the on-premises RMS License Managers[1] and performs a variety of administrative functions associated with them. It displays elaborate information, which includes the License Manager information, feature information, and license and client information.

Start WlmAdmin

- Launch WlmAdmin – Administration Application (WlmAdmin.exe) from WLMAdmin directory.

Landing page of WlmAdmin

Server Watchlist

- Allows creation of a list of defined License Managers.

- Click the + icon shown next to Server Watchlist. The Add Server field appears. In the Add Server field, type the host name or IP address of the License Manager host name and click Add. Once a License Manager is added, all the features-version combinations for which the License Manager is hosting licenses, are listed.

- You can add more License Managers to view the licenses hosted by them.

- **NOTE** WlmAdmin may take time in showing an error message if you have clicked a License Manager (in the Server Watchlist) that is either not running or does not exist. WlmAdmin attempts to find the License Manager and shows an error message when it fails in doing so.

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Subnet Servers

- Discovers the License Managers on your network subnet.
- If not sure of the License Manager computer's host name or IP address, please wait for WlmAdmin to display License Managers under Subnet Servers. WlmAdmin broadcasts to the network to discover all License Managers and display them here.
- Click the left-side arrow ❯ to list any License Managers in the subnet.
- Click the + icon shown next to a subnet server to add the selected server to Server Watchlist.
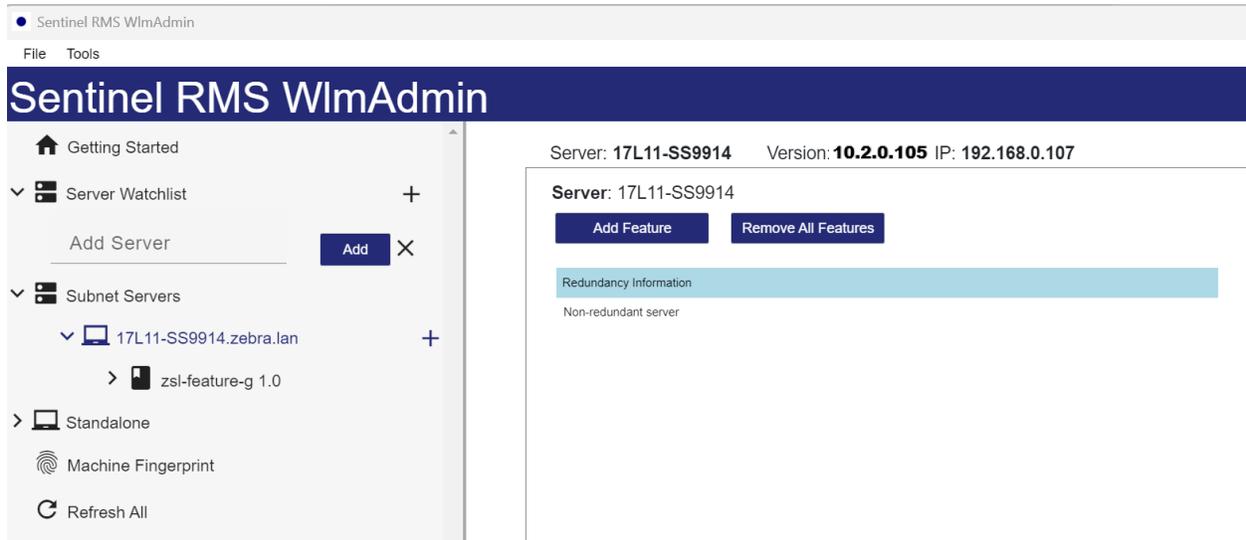
Machine Fingerprint

- Displays the fingerprint information of the current machine.
- Select from the available fingerprint options to generate the locking information of the current machine.

-
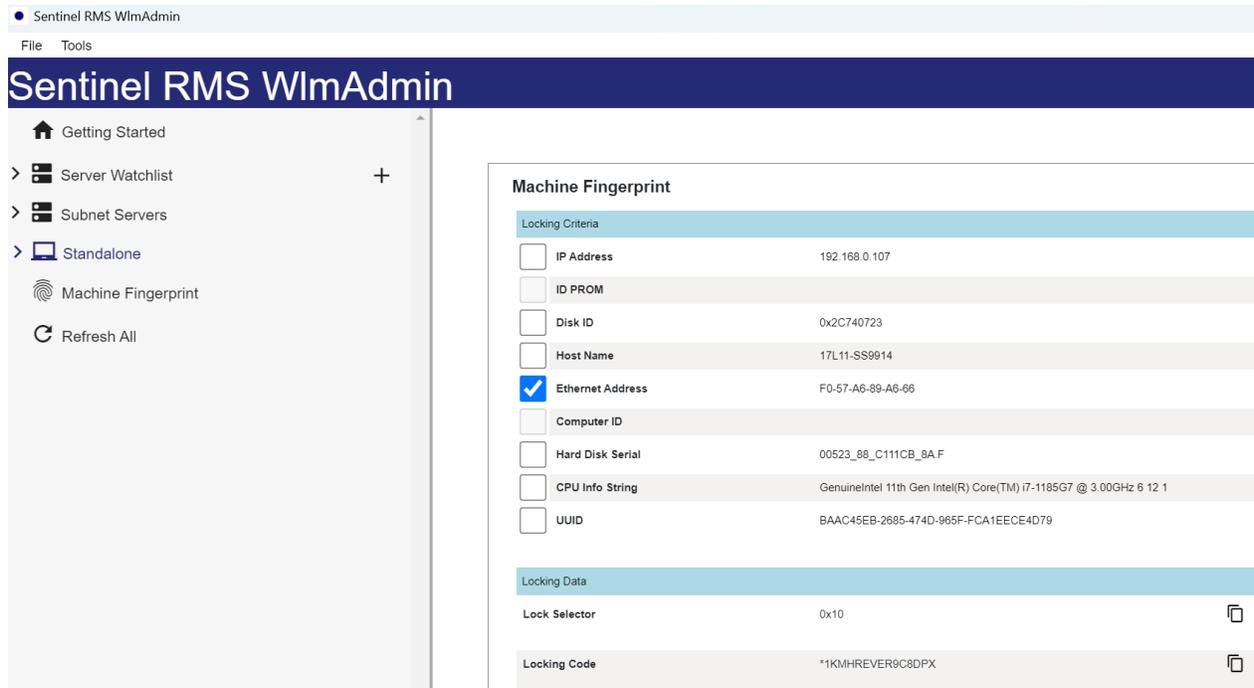
• **NOTE:** Local License Server supports Machine Fingerprint type Ethernet address only

Refresh All

• Displays new information on that group of License Managers.

Lock Code

Note: Lock code is needed to Activate License and Download License File from ECP Portal,

Customer License Portal

https://zebratechnologies.prod.sentinelcloud.com/ecp/

Method

• Run WlmAdmin.exe file

• Navigate to the Machine Fingerprint Section to obtain locking code.

• Uncheck all Locking Criteria and keep only Ethernet Address option checked.

• Locking Code is displayed under Locking Data -> Locking Code.

Setup Local License Server in Online Mode.

Network Online Variant License – Activate License.

How to obtain Customer Id.

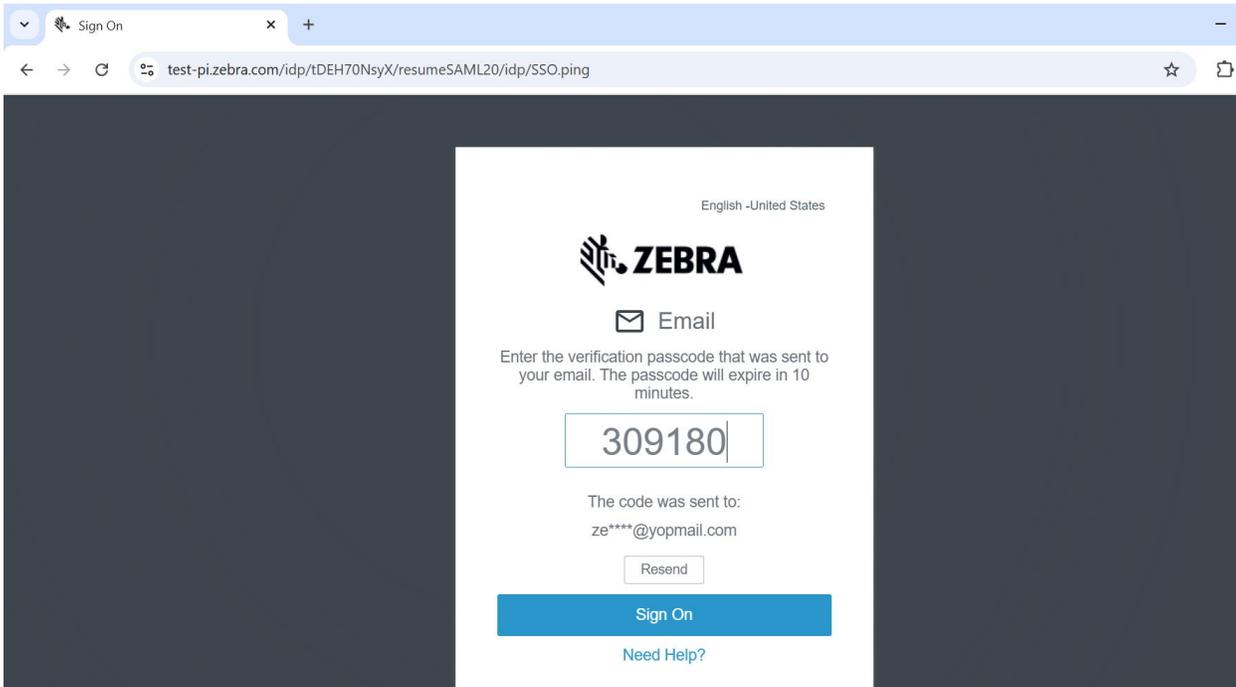**Step 1:** Login into ecp portal https://zebratechnologies.prod.sentinelcloud.com/ecp/

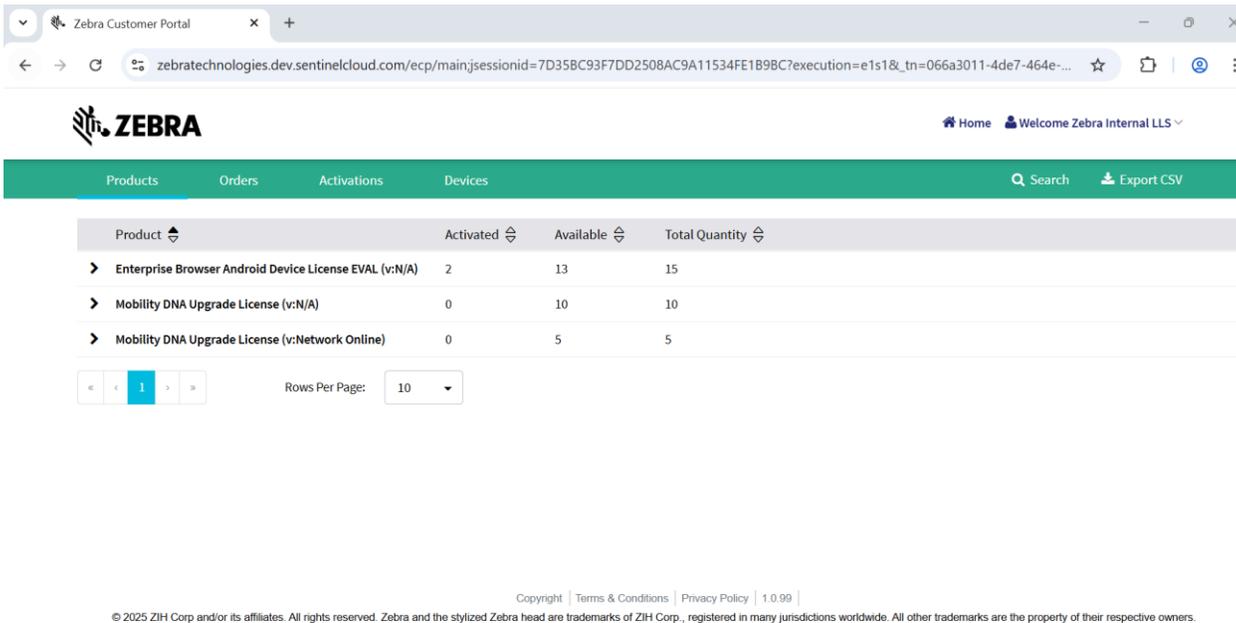**Step 2:** Enter username
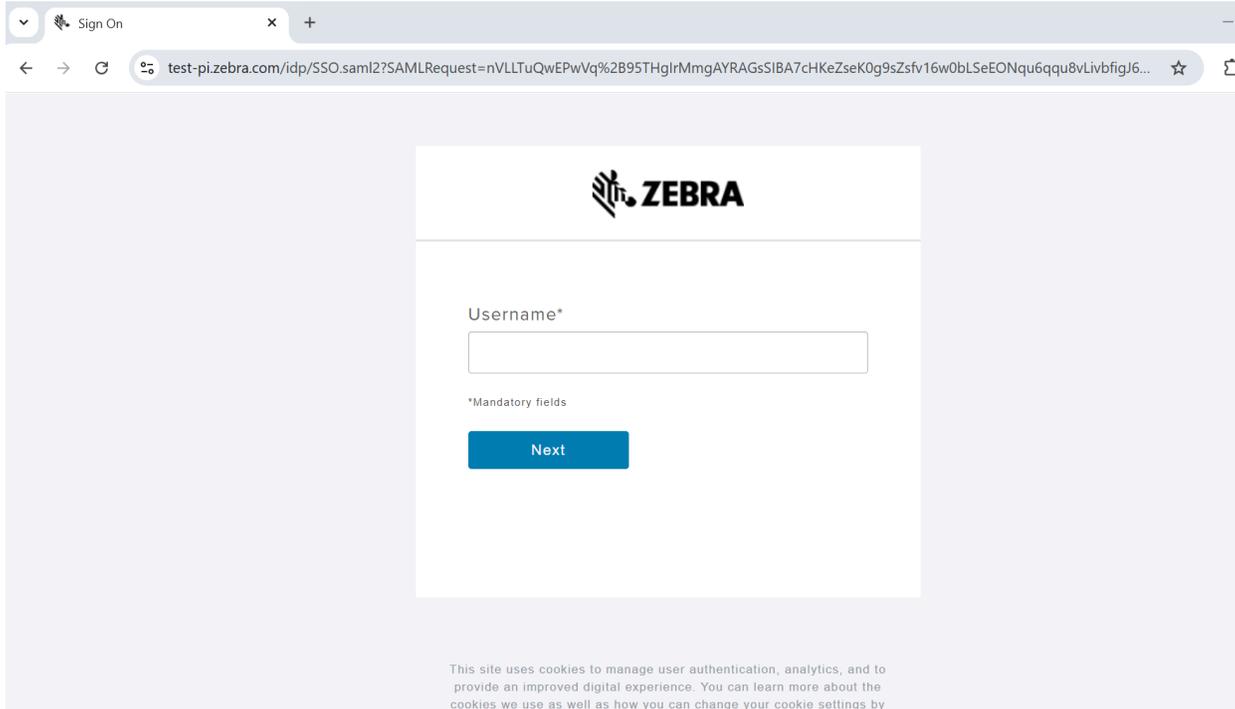
Step 3: Enter password
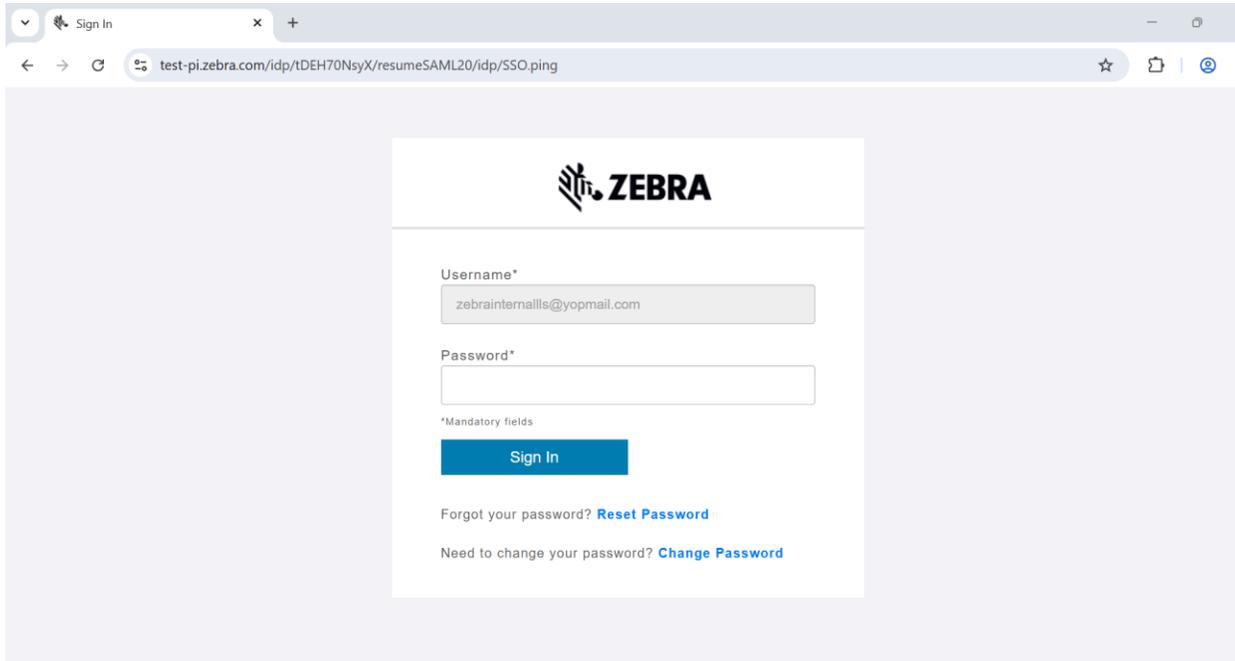
Step 4: Enter verification passcode and click on sign on

Step 5: Successfully logged into ECP portal.

Step 6: Navigate into Orders menu icon to view all the license details.

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Products	Orders	Activations	Devices					🔍 Search	⬇ Export CSV

Order Date ⬍	Order Number ⬍	PO Number ⬍	Contract Number ⬍	Badge ID ⬍	Product ⬍	Product Key ID ⬍	Expiration Date ⬍	Activated ⬍	Available ⬍	Total ⬍	Actions
8/7/2025	Zebra Internal LLS Test	Zebra Internal LLS Test		BDG-Q2B Y7S4X	Mobility DNA Upgrade License (v:N/A)	b9406ee8-281a-4d96-9403-f7cfe497bdb8	None	0	10	10	Activate View Details
8/7/2025	Zebra Internal LLS Test	Zebra Internal LLS Test		BDG-Q2B Y7S4X	Enterprise Browser Android Device License EVAL (v: N/A)	0f67f4d1-04f0-47be-be54-336844045e8f	11/5/2025	2	13	15	Activate View Details
8/22/2025				NOT_ASSIGNED	Mobility DNA Upgrade License (v:Network Online)	a9a713f9-665c-4f3e-bc0c-a50026bfa5bb	None	1	4	5	View Details

« ‹ 1 › »   Rows Per Page: 10 ▼

Step 7: Click on **View Details** button and navigate to find customer identifier.

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Products	Orders	Activations	Devices		🔍 Search	⬇ Export CSV

View Entitlement Details

Creation Date	2025-08-07 14:20
EID	1576912b-575c-44ec-87ec-032f9ef8c807
Start Date	2025-08-07
Customer Name	Zebra Internal LLS
Customer Identifier	61156982_LLS
Customer External ID	

Close

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Activate Network Online Variant License

Step 1: Navigate to SentinelCloudPlugin directory, and locate

sntlcloudp_configuration_zebratechnologiescorporation.xml configuration file and

sntlcloudps_zebratechnologiescorporation executable file.

Step 2: Open SentinelCloudPlugin configuration XML file in text editor and enter customer identifier, pkid (liecnse key), product variant, product quantity, fingerprint friendly name (must provide unique friendly name).

> **Note:** Please make sure to enter productVariant value to be "Network Online" always for Online LLS. Need to edit highlighted details and provide customer id, pkid, productvariant, productquantity and fingerprintFriendly Name value. Multiple PKIDs for different Products can be provided.

```
sntlcloudp_configuration_zebratechnologiescorporation.xml
 7    <Configuration>
 8        <!-- Address of Directory Services Server. Make sure you write the specific YPS URL provided for you by Thales (in the order e
 9
10        Note: If you purchased the Sentinel solution before 1st June 2019, it may happen that you are not using a vendor-specific YPS
11        For more details, refer to the appendix in the "Sentinel Cloud Licensing (SCL) Add-on Installation and Configuration Guide." -
12        <YPSaddress value="https://zebratechnologies.prod.sentinelcloud.com/YPServer" />
13
14        <!-- Address of SCL components hosted in Cloud -->
15        <TenantHostAddress value="https://zebratechnologies.prod.sentinelcloud.com/" />
16
17        <!-- Registration Token for getting Access Token using which Cloud LM Rest APIs can be consumed -->
18        <RegistrationToken value="" />
19
20        <!-- Port of local RMS License Manager -->
21        <!-- <LicenseManager port="5093" /> -->
22
23        <!-- Customer for which SCP will retrieve licenses -->
24        <CustomerList>
25            <!-- Customer ID as defined in EMS. This property  takes 'Customer ID' from the EMS portal or 'identifier' from the custom
26            <Customer id="61156982_LLS">
27                <!-- List of product keys and variants for which licenses are to be retrieved. This is an optional property and used m
28
29                <ProductKeys>
30                    <ProductKey pkid="4d4c4f9a-dc86-472f-889d-e54eaf85c9b9" productvariant="Network Online" productquantity="5"/>
31                    <ProductKey pkid="3m5c4f9a-rt86-472f-889d-e54eaf88p9b9" productvariant="Network Online" productquantity="10"/>
32                </ProductKeys>
33
34            </Customer>
35        </CustomerList>
36
37        <!-- Unique friendly name of the machine. The same friendly name must be used in EMS during fingerprint registration, if finge
38        <FingerprintFriendlyName value="Test_LLS_Thales_HP_Firefly"/>
39
40        <!-- Option to start the service in offline mode(By default service will run in lease mode) -->
```

Step 3: After successfully adding details into xml configuration file, open command prompt(cmd) in Administrative mode and change directory(cd) inside SentinelCloudPlugin


```
Administrator: C:\Windows\System32\cmd.exe
Microsoft Windows [Version 10.0.17763.7678]
(c) 2018 Microsoft Corporation. All rights reserved.

C:\WINDOWS\system32>cd E:\LLSInstaller\SentinelCloudPlugin
```

```
E:\LLSInstaller\SentinelCloudPlugin>dir
 Volume in drive E is E Drive
 Volume Serial Number is 8093-9F9C

 Directory of E:\LLSInstaller\SentinelCloudPlugin

08/21/2025  06:32 AM    <DIR>          .
08/21/2025  06:32 AM    <DIR>          ..
12/26/2023  12:47 AM         1,047,552 sntlcloudps_zebratechnologiescorporation.exe
08/21/2025  06:52 AM             4,677 sntlcloudp_configuration_zebratechnologiescorporation.xml
               2 File(s)      1,052,229 bytes
               2 Dir(s)  33,131,651,072 bytes free

E:\LLSInstaller\SentinelCloudPlugin>
```

Step 4: Install Sentinel Cloud Plugin (SCP) Service file by running command in cmd.

Command - **sntlcloudps_zebratechnologiescorporation.exe -install**

```
E:\>cd E:\LLSInstaller\SentinelCloudPlugin

E:\LLSInstaller\SentinelCloudPlugin>dir
 Volume in drive E is E Drive
 Volume Serial Number is 8093-9F9C

 Directory of E:\LLSInstaller\SentinelCloudPlugin

08/21/2025  06:32 AM    <DIR>          .
08/21/2025  06:32 AM    <DIR>          ..
12/26/2023  12:47 AM         1,047,552 sntlcloudps_zebratechnologiescorporation.exe
08/21/2025  06:52 AM             4,677 sntlcloudp_configuration_zebratechnologiescorporation.xml
               2 File(s)      1,052,229 bytes
               2 Dir(s)  33,131,651,072 bytes free

E:\LLSInstaller\SentinelCloudPlugin>sntlcloudps_zebratechnologiescorporation.exe -install
        =========================================================
               Sentinel Cloud Plugin Service 10.2.0.94
               Copyright (C) 2023 THALES. All Rights Reserved
        =========================================================

Starting in command line mode

Installing Sentinel Cloud Plugin Service For zebratechnologiescorporation...
Installed Sentinel Cloud Plugin Service For zebratechnologiescorporation.
```

Step 5: Start Sentinel Cloud Plugin (SCP) Service file by running command in cmd.

Command - **sntlcloudps_zebratechnologiescorporation.exe -start**

```
 Directory of E:\LLSInstaller\SentinelCloudPlugin

08/21/2025  06:32 AM    <DIR>          .
08/21/2025  06:32 AM    <DIR>          ..
12/26/2023  12:47 AM         1,047,552 sntlcloudps_zebratechnologiescorporation.exe
08/21/2025  06:52 AM             4,677 sntlcloudp_configuration_zebratechnologiescorporation.xml
               2 File(s)      1,052,229 bytes
               2 Dir(s)  33,131,651,072 bytes free

E:\LLSInstaller\SentinelCloudPlugin>sntlcloudps_zebratechnologiescorporation.exe -install
        =========================================================
               Sentinel Cloud Plugin Service 10.2.0.94
               Copyright (C) 2023 THALES. All Rights Reserved
        =========================================================

Starting in command line mode

Installing Sentinel Cloud Plugin Service For zebratechnologiescorporation...
Installed Sentinel Cloud Plugin Service For zebratechnologiescorporation.
E:\LLSInstaller\SentinelCloudPlugin>sntlcloudps_zebratechnologiescorporation.exe -start
        =========================================================
               Sentinel Cloud Plugin Service 10.2.0.94
               Copyright (C) 2023 THALES. All Rights Reserved
        =========================================================

Starting in command line mode

Starting Sentinel Cloud Plugin Service For zebratechnologiescorporation...
Started Sentinel Cloud Plugin Service For zebratechnologiescorporation.
E:\LLSInstaller\SentinelCloudPlugin>
```

Step 6: Wait 1-2 minute and Launch WlmAdmin Application. – Verify if License successfully added to Local License Server.

Note: Please use below listed commands to restart Local License Server to refresh licenses.

Command - **sntlcloudps_zebratechnologiescorporation.exe -stop**

Command - **sntlcloudps_zebratechnologiescorporation.exe -start**

Sentinel Cloud Plugin (SCP) Proxy Configuration Settings

Locate **sntlcloudp_configuration_zebratechnologiescorporation.xml** configuration file and modify the following elements:

ProxyMode: Proxy connection mode.

The possible values are:

1. Indicates that the proxy is disabled.

   NOTE The licensed application will not connect to the cloud if the client

   machine is in a proxy environment and proxy settings for SCP are not defined.

2. Refers to the manual proxy mode. In this mode, you need to manually set the proxy settings.

3. Refers to the auto proxy mode. In this mode, the proxy settings are automatically detected.

Manual Proxy Settings (ProxyMode value="2")

   ProxyHost: Proxy host name or IP address.

   ProxyPort: Port at which the proxy is running.

Proxy Credentials (when authentication is enabled in the proxy server)

   ProxyUser: User name for the proxy authentication.

   ProxyPassword: Proxy password for the proxy authentication.

Auto Proxy Settings (ProxyMode value="3")

In this mode, the proxy settings are automatically detected. There are two automatic proxy detection methods:

- WPAD (Web Proxy Autodiscovery Protocol): The proxy detection can be done using either DNS or DHCP discovery methods.

  NOTE DHCP has a higher priority than DNS. The WPAD-enabled client first uses DHCP to find a proxy server, and if the desired information is not obtained, DNS is used. If the wpad.dat file is not found or if a proxy is not detected while running wpad.dat, no error is returned. Instead, the client tries to connect in a manner similar to when the proxy is disabled (No Proxy).

- PAC (Proxy Auto-configuration): The location of the proxy script file is specified in the configuration file. In the auto proxy mode, WPAD takes precedence over PAC.

- **ProxyPAC:** Location of the auto-proxy configuration (.pac) file to be used for the proxy detection. Use this option for auto-proxy with the .pac file support. This option takes the URL or path of the .pac file as input.

Setup Local License Server in Offline Mode.

Offline Variant License - Activate & Download License File

Login to ECP Portal activate the license and download license file.

1. Go to ECP Portal, https://zebratechnologies.prod.sentinelcloud.com/ecp/

2. Go to Products-> Select product -> click Activate

3. Enter quantity to Activate

4. Select Variant, **always select Network Offline variant** for Local License Server.

5. Enter Device Name (Friendly Name), Device Id (Friendly Name) and Locking Criteria (Ethernet Address Locking Code)

6. Click on Activate

7. Download License File

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Order Activation

Order ID : 1576912b-575c-44ec-87ec-032f9ef8c807

| Activating For Myself | Activating For Another User |

Note: Activate and Download license file for OFFL

| Products | Downloads |

☑ Product

☑ Enterprise Browser Android Device License EVAL (v:)
Expiration:11/5/2025

Activation Completed successfully

Order ID: 1576912b-575c-44ec-87ec-032f9ef8c807   Customer Name: Zebra Internal LLS

Product	Activated
Enterprise Browser Android Device License EVAL (v:Network Offline)	1

Download License File   Close

Enterprise Browser Android Dev ⌄

Product Lock Code

Device :	* Device Name :	* Device ID :	* Ethernet Address :
Available New	TESTDEVICE_NAME	TESTDEVICE_ID	*1KMHREVER9C8DPX

Cancel   **Activate**

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| Products | Orders | Activations | Devices | | | 🔍 Search | ⬇ Export CSV |

| Activation Date ⇅	Transaction ID ⇅	Product Key ID ⇅	Device Name ⇅	Device ID ⇅	Locking Code ⇅	Product ⇅	License File	Activated ⇅	Available ⇅
8/7/2025	8f0d4af2-3ea9-4352-acb7-4fc06924e643	0f67f4d1-04f0-47be-be54-336844045e8f	TESTDEVICE_NAME	TESTDEVICE_ID	*1KMHREVER9C8DPX	Enterprise Browser Android Device License EVAL (v:N/A) Variant Network Offline Expiration: 11/5/2025	Download	1	14

« ‹ 1 › »   Rows Per Page: 10 ▼

Add License files to the Local License Server using WlmAdmin
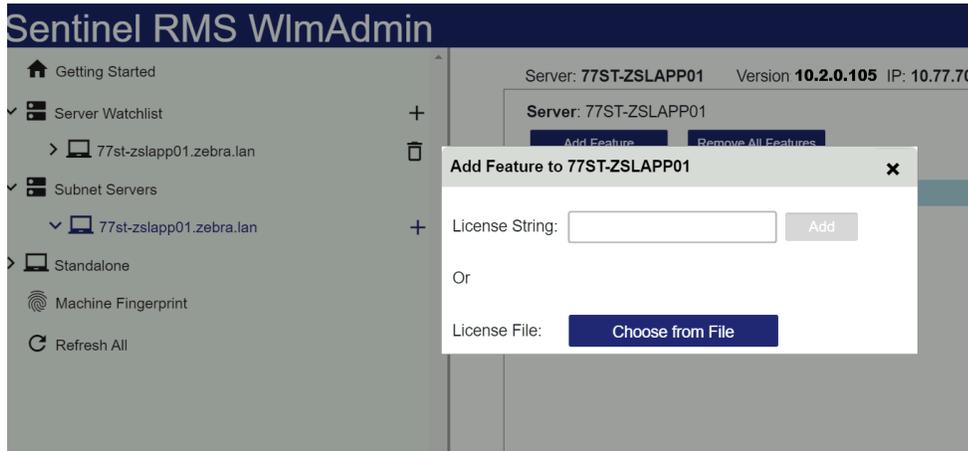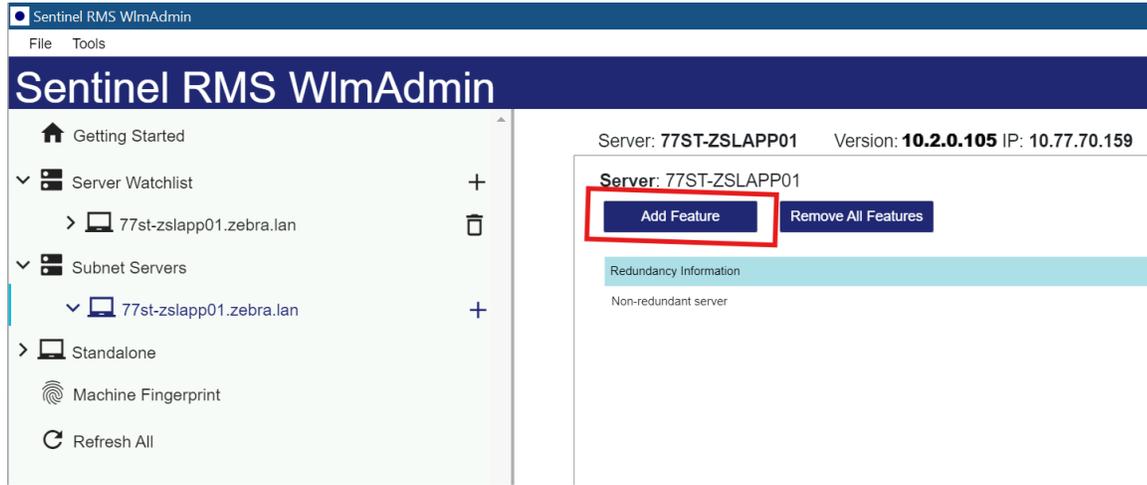
Run WlmAdmin.exe file
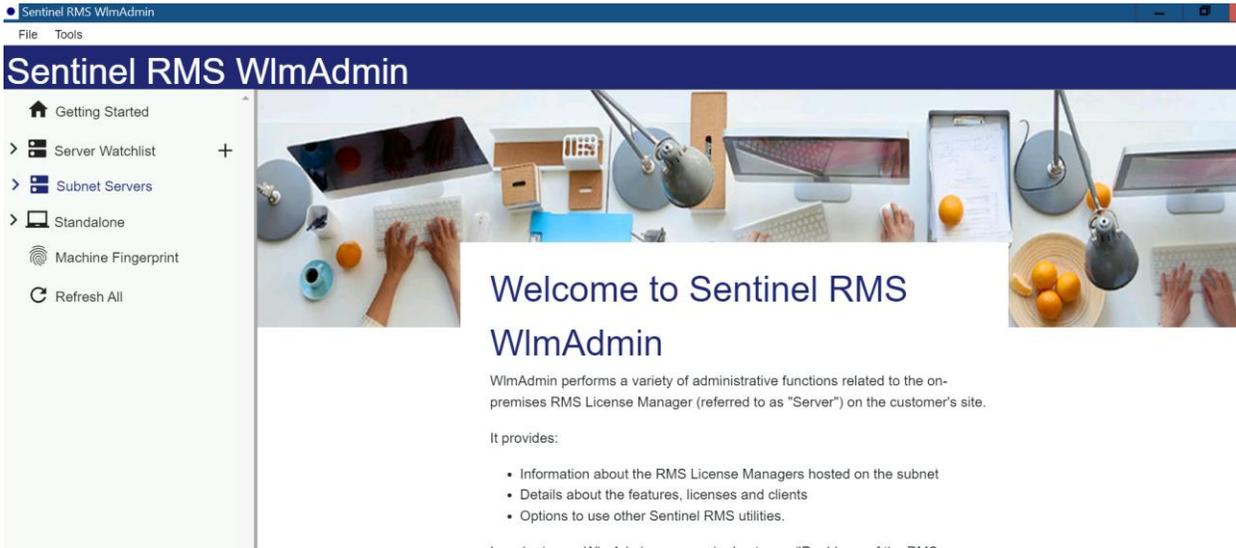
Subnet Servers

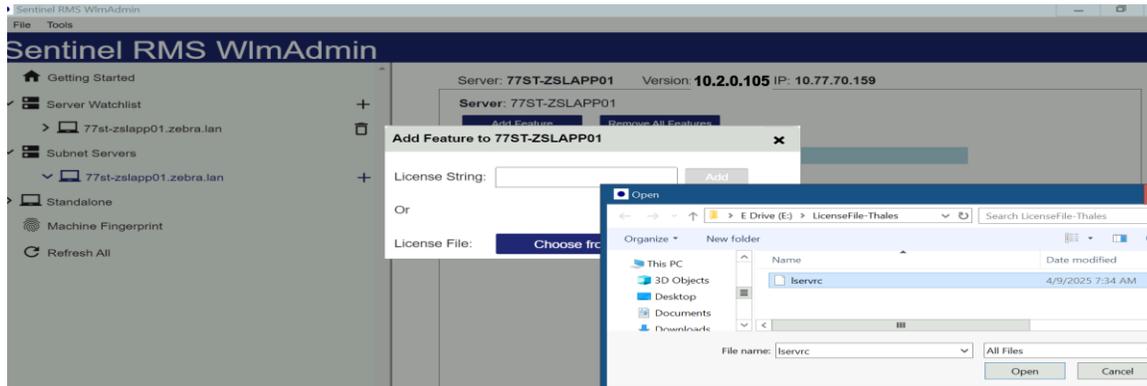Click on Subnet Servers menu option, and click on server
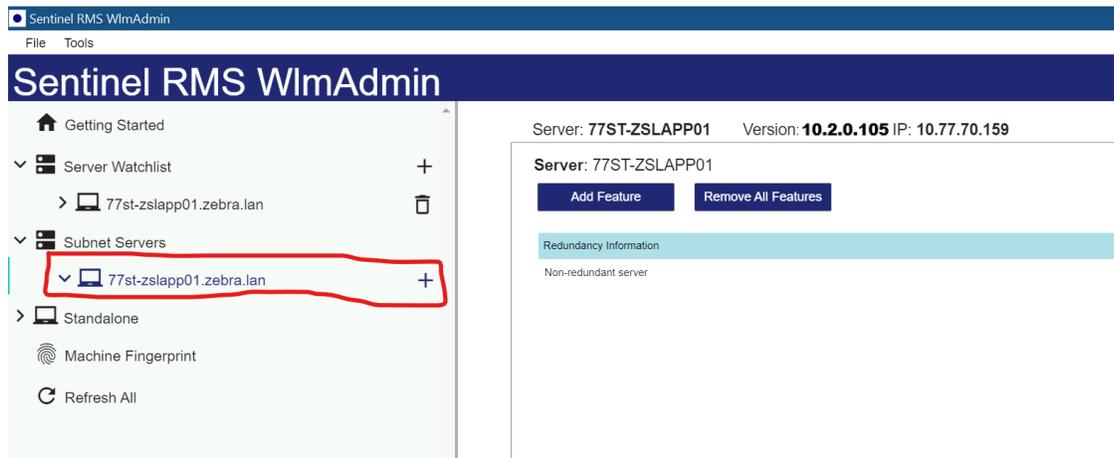
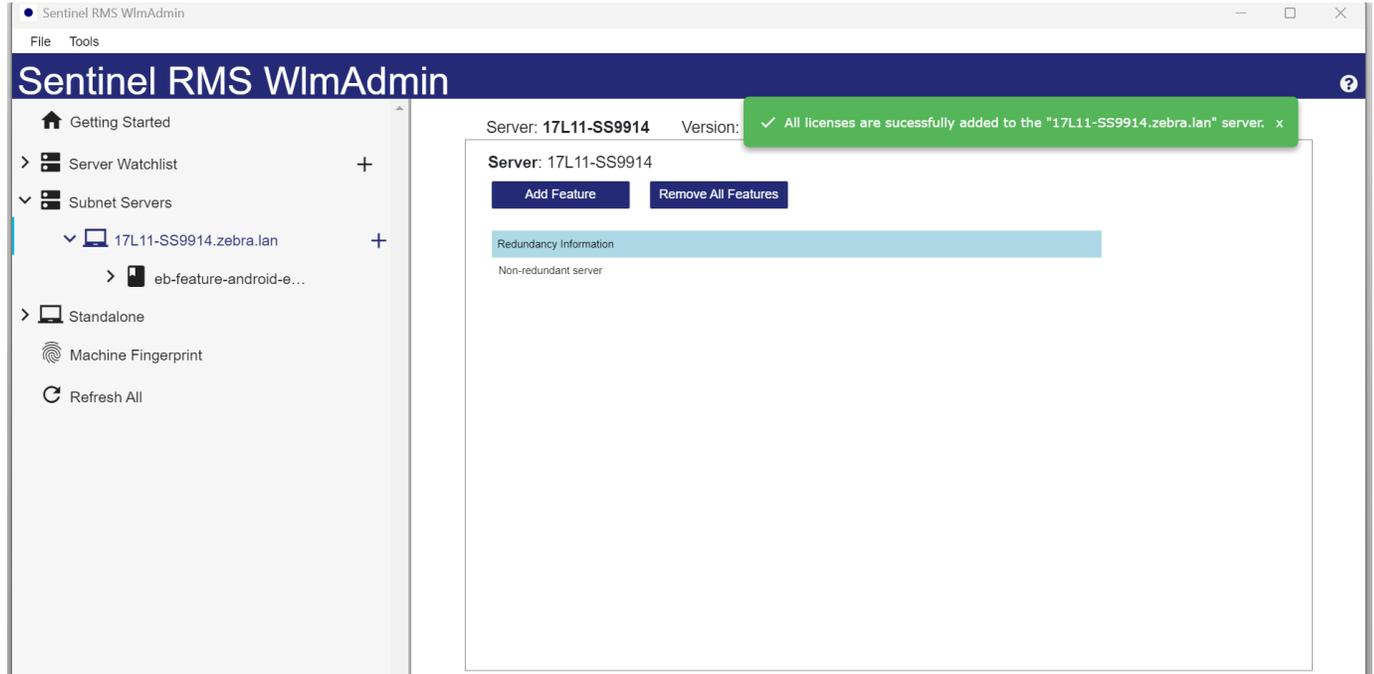## Add Feature

Click on Add Feature

Add License File

Click Choose from file and select downloaded license file from Customer portal with name – "lservrc".
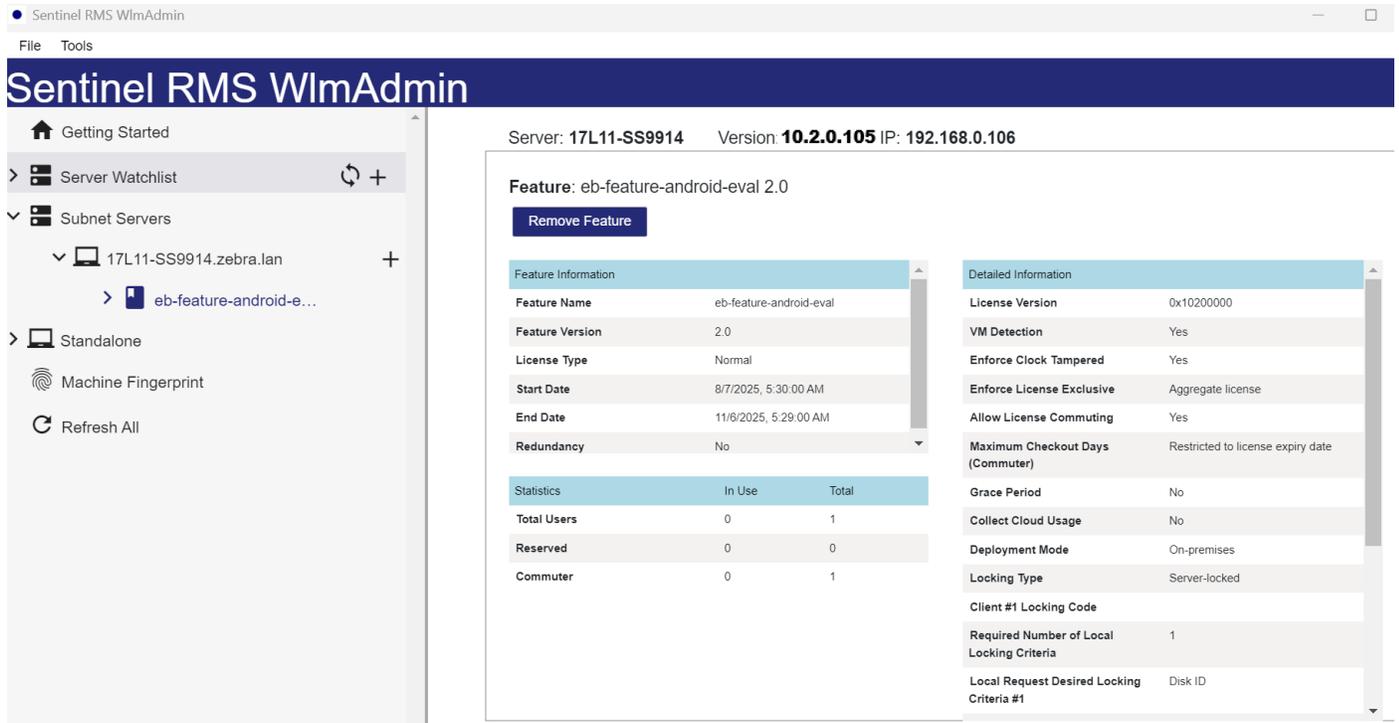
License File Added

Success message notification is displayed.

License Details

To review license details go to subnet servers and select the server, and click on the feature.

Add-On Orders for Additional Licenses or Renewals.

NOTE WlmAdmin can have only one license key for a particular Product/Feature. Please make sure to consolidate your purchases into a single license key for using it in Local License Server. If you are using subscription licenses, make sure to co-terminate all your contracts so that the licenses purchased can be consolidated into a single license key.

Add-on Orders licenses can be added to existing Local License Server with the help of Zebra Team.

Steps to follow after Add-On Order Processing is completed.

- o Go to ECP Portal, https://zebratechnologies.prod.sentinelcloud.com/ecp/

- o Locate the Consolidated License Key (PKID) and Download the License File (lservrc).

- o Apply the new license file to the Local License Server using WlmAdmin Application.

NOTE WlmAdmin retains old license record entries:

- The old license record (e.g. Lic0, Lic1, etc.) status changes to inactive.

- The new license record is shown with active status and updated expiration date or quantity.

- Current Devices licensed using Local License Server needs to be initiate License Refresh.

Frequently Asked Questions

Q: How do I get access to the Zebra's Licensing Portal?

A: Follow the Instructions in the system generated mail upon successful creation of the entitlements.

Q: How do I get my licenses consolidated?

A: Reach out to Zebra Software Licensing Team ZebraSWLicensingTeam@zebra.com for License Consolidation.

Q: How do I get my contracts co-terminated?

A: Reach out to Zebra ZaaS Team ZaaS@zebra.com for contracts co-termination.

For any technical issues, please visit Zebra Technical Support for assistance.