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About This Guide

This *Novell ZENworks Subscriptions Reference* includes information to help you successfully use Subscription services in a Novell ZENworks system.

The information in this guide is organized as follows:

- Chapter 1, “Overview,” on page 7
- Chapter 2, “Creating Subscriptions,” on page 11
- Chapter 3, “Managing Subscriptions,” on page 19
- Chapter 4, “Verifying the Remote Server Certificate,” on page 29

**Audience**

This guide is intended for ZENworks administrators.

**Feedback**

We want to hear your comments and suggestions about this manual and the other documentation included with this product. Please use the User Comments feature at the bottom of each page of the online documentation.

**Additional Documentation**

ZENworks is supported by other documentation (in both PDF and HTML formats) that you can use to learn about and implement the product. For additional documentation, see the ZENworks documentation Web site.
Overview

The Subscriptions feature in ZENworks Configuration Management makes it easy to set up a subscription to repositories such as Novell Update, Red Carpet Enterprise, or other external repositories, and replicate content to the ZENworks Primary Servers. The managed devices can obtain the updates directly from the ZENworks Server instead of obtaining them from the remote repositories. ZENworks Configuration Management provides an easy-to-use graphical user interface to create these subscriptions. You can also specify a schedule to run the subscription replication.

ZENworks Configuration Management lets you use subscriptions to replicate content from NU, RCE, RHN, YUM or RPM-MD (authenticated and unauthenticated), ZENworks Linux Management, and Static repositories. It also lets you create subscriptions to connect to the Apple and Google servers to deploy VPP apps and enroll devices using Android Enterprise, respectively.

Subscriptions help you to obtain most of the software you want to distribute to managed devices. You can create subscriptions to:

- Select the targets for which to replicate the content and create bundles.
- Replicate content and create Linux bundles to deploy the software to managed devices.
- Replicate content and create Linux Dependency bundles to make the software packages available to the managed devices to resolve package dependencies.
- Download the source RPMs from remote repositories and create monolithic Linux bundles.
- Replicate patches from remote update repositories to create Patch bundles. If you want to replicate only the patches of a selected category, you can use category-based filters.
- Distribute apps purchased using the Apple Volume Purchase Program.
- Enroll Android devices in the work profile and work-managed device modes.

This section provides information about the various subscription types and the different subscription settings.

- “Understanding Subscription Types” on page 7
- “Configuring the Subscription Settings” on page 8

Understanding Subscription Types

The following types of subscriptions are available in Linux Package Management:

**Android Enterprise Subscription:** Allows you to create a subscription to enable the organization to register for the Android Enterprise program. For more information, see the ZENworks Mobile Management Reference guide.

**Apple VPP Subscription:** Allows you to create a subscription to enable ZENworks to distribute apps purchased through the Apple Volume Purchase Program. For more information, see the ZENworks Mobile Management Reference guide.
**CVE Subscription:** Allows you to download Common Vulnerabilities and Exposure (CVE) data from the National Vulnerability Database (NVD) to a local server in the zone. For more information see the [Security guide](#).

**Novell Subscription:** Allows you to select subscriptions that you are entitled to download from Novell Customer Center based on your credentials. By using this subscription, you can replicate updates for SUSE Linux Enterprise 10 Service Pack 1 or later distributions, all SUSE Linux Enterprise 11 distributions, and OES 2 distributions. You can create bundles in your Management Zone with the replicated content.

**RCE Subscription:** Allows you to select subscriptions that you are entitled to download from Novell Customer Center based on your credentials. By using this subscription, you can replicate updates for SUSE Linux Enterprise 10. You can also create bundles in your Management Zone with the replicated content.

**RHN Subscription:** Allows you to replicate content from the Red Hat network for Red Hat Enterprise Linux distributions.

**RPM-MD Subscription:** Allows you to replicate subscriptions and packages from both authenticated and unauthenticated RPM-MD (YUM) repositories.

**Static Subscription:** Allows you to replicate content from the file system located on your local server and create bundles. You must have a static replication source available in the file system. You can create the static replication source by using the static replication option from any other subscription type.

**ZENworks Subscription:** Allows you to select catalogs that you are entitled to download from the ZENworks Server based on your credentials and replicate them on your local server. You can use these catalogs to create bundles in your zone.

**SUSE Subscription:** Allows you to download the catalogs available in the SUSE repository from SUSE Customer Center and replicate them to the local server in your Management Zone.

**ZLM Subscription:** Allows you to select subscriptions that you are entitled to download from the ZENworks Linux Management server based on your credentials. You can use these subscriptions to create bundles in your Management Zone.

### Configuring the Subscription Settings

To download the package updates from a remote repository, you can configure the settings on the Subscription Settings page in ZENworks Control Center.

1. Log in to ZENworks Control Center.
2. Click Configuration > Infrastructure Management > Subscription Settings.

You can configure the following subscription settings on the Subscription Settings page:

- “Subscription Replication Settings” on page 9
- “Subscription Performance Settings” on page 9
- “Proxy Settings for Subscriptions” on page 9
Subscription Replication Settings

- **Throttling Rate (KBps):** Specify the rate at which you want to download the updates. If no value is specified, the replication uses the entire available bandwidth.

  For example, if you specify the throttling rate as 100, the package updates are downloaded from the remote repository at a rate of 100 kilobytes per second.

- **Session Connection Timeout (secs):** Specify the time after which you want to attempt reconnection to the remote repository, in case of a connection failure. The default value is 120 seconds.

Subscription Performance Settings

- **Maximum Replication Sessions:** Specify how many subscription sessions can be run or replicated simultaneously. The default value is 2, and the maximum value is 5.

- **Subscription Cache:** Select whether to enable or disable the subscription cache. The default value is Enabled.

  If this setting is enabled, the metadata information is read from the cache instead of downloading it from the repository which greatly reduces the response time when browsing for catalogs on the remote repository.

Proxy Settings for Subscriptions

If you have configured your network to use a proxy server, you must configure the proxy server subscriptions.

1. Use a text editor to open the `lpm-server.properties` file. This file is located in `/etc/opt/novell/zenworks/` directory on Linux and in the `Novell\ZENworks\conf` directory on Windows.

2. Edit the file as follows:
   - Set the value of `subscription-proxyaddress` to the IP address of the proxy server.
   - Set the value of `subscription-proxyport` to the port number of the proxy server.
   - Set the value of `subscription-proxyuser` to the name of the proxy user.
   - Set the value of `subscription-proxypassword` to the password of the proxy username.
   - Set the value of `subscription-useNTLM` to true if the proxy server uses an NTLM realm. By default, the value is false.

3. Save the file.

When you run a subscription, the subscription automatically uses these settings.
Creating Subscriptions

You can select the platforms and update categories you want to subscribe to and then schedule the subscription to check for updates regularly. Additionally, Linux subscription management integrates with the bundle change management features of ZENworks Configuration Management. This allows you to have new software from the subscriptions sources to be created as a sandbox where the changes can be tested before being published in the production environment.

- “Prerequisites for Creating Subscriptions” on page 11
- “Creating Subscriptions by Using ZENworks Control Center” on page 13
- “Creating a Red hat Subscription by Using nu.novell.com” on page 16
- “Creating Subscriptions by using the zman Command Line Utility” on page 17

Prerequisites for Creating Subscriptions

- You must first create the credentials before you can use them to create subscriptions. Credentials are used to authenticate to the repositories.
  
  For more information on how to create credentials, see “Using the Credential Vault”.

- You need to ensure that you have the Device rights to select the subscription server.
  
  For more information on Device rights, see Device Rights in the ZENworks Administrator Accounts and Rights Reference.

  If you do not have the Device rights, by default, the current server will be selected. However, after the subscription is created, when you try to view the subscription details, the server name is not displayed and an exception is displayed in the logs.

The following table describes how to obtain the username, password, and other prerequisites for each subscription:
**Subscription Types** | **Prerequisites**
--- | ---
Novell Subscription, RCE Subscription | You can obtain the username and password to use as credentials either by directly contacting Novell Customer Center or by obtaining the values of the deviceid and secret files from a device that is already registered to Novell Customer Center.  
For more information on how to register with Novell Customer Center, see the Novell Customer Center documentation (http://www.novell.com/documentation/ncc/).  
On SUSE Linux Enterprise 10 and OES2 devices, you can obtain the values of the deviceid and secret files from the `/etc/zmd/deviceid` and the `/etc/zmd/secret` locations in order to authenticate to the NU or RCE repositories.  
On SUSE Linux Enterprise 11 devices, you can obtain the username and the password values from the `/etc/zypp/credentials.d/NCCcredentials` file.

ZLM Subscription | You must obtain the IP address or the DNS name of the ZENworks Linux Management Server from which you want to replicate content. You must also obtain the deviceid and secret values of a device that is registered to the ZENworks Linux Management Server. By using these as credentials, you can replicate only the content that the device is entitled to.  
On SUSE Linux Enterprise 10 devices or SUSE Linux Enterprise 11 devices, you can obtain the value of deviceid and secret from the `/etc/zmd/deviceid` and `/etc/zmd/secret` files respectively, or from the `/etc/opt/novell/zenworks/zmd/deviceid` and `/etc/opt/novell/zenworks/zmd/secret` files on any other registered devices.

ZENworks Subscription | You must obtain the IP address or the DNS name of one of the Primary Servers in the ZENworks zone from which you want to replicate content. The Primary Server must be configured as a Sharing Server in the remote ZENworks zone. You must also obtain a subscription registration key from the remote ZENworks zone. You can contact the remote ZENworks zone administrator to obtain the Primary Server address and the subscriber registration key.

YUM (RPM-MD) | Obtain the URL of an available YUM (RPM-MD) repository. If the repository is authenticated, you must obtain the username and password to access the repository URL.

RHN Subscription | 1. From an RHEL device, obtain the `systemid` file that is located in `/etc/sysconfig/rhn/`.  
2. Use the `systemid` file as a credential to authenticate to the RHN repository.

SUSE Subscription | You can obtain the username and password (to use as credentials) from the following location in the SUSE Customer Center: Organization > Organization Credentials. You can use only Organization Credentials. Individual device credentials will not work.

Apple VPP Subscription | An MDM role must be assigned to one or more Primary Servers.
Creating Subscriptions by Using ZENworks Control Center

For more information on creating Apple VPP Subscription and Android Enterprise Subscription, see the ZENworks Mobile Management Reference guide.

1 In ZENworks Control Center, click Configuration > Subscriptions.

2 In the Subscriptions list, click New, then click Subscription to display the Select Subscription Type page.

3 Select the subscription type that you want to create, then click Next to display the Define Details page.

4 Fill in the fields:

   **Subscription Name:** Specify a unique name for the subscription.

   **Folder:** Type the name or browse to the folder that this subscription will be created in. By default, the subscription will be created in the /Subscriptions folder.

   **Download to Folder:** Browse to and select the destination folder where you want to download the subscriptions. The default folder is /Bundles.

   **NOTE:** The specified folder is not applicable when you choose to create a Static Subscription. Irrespective of the folder you specify, the subscriptions are downloaded to the following folders:

   - **On Windows:** %ZENWORKS_HOME%\work\cache\pkg-repo\Static_Subscriptions
   - **On Linux:** /var/opt/novell/zenworks/cache/pkg-repo/Static_Subscriptions

   **Description:** Provide a short description for the subscription. This description is displayed on the subscription’s Summary page.

5 Click Next to display the Define Remote Server Details page.

   Depending on the type of subscription you select, the following table describes the tasks you must perform on the Remote Server Details page:

<table>
<thead>
<tr>
<th>Subscription Type</th>
<th>Task</th>
<th>Additional Details</th>
</tr>
</thead>
</table>
| Novell Subscription             | 1. In the Remote Server URL field, specify the URL of the NU repository you want to access.  
                                              2. Browse to and select the remote server credential from the Credential Lookup dialog box. | By default, the Remote Server URL field displays https://nu.novell.com/repo.  
                                              For more information, see . |
<table>
<thead>
<tr>
<th>Subscription Type</th>
<th>Task</th>
<th>Additional Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Subscription</strong></td>
<td><strong>Task</strong></td>
<td><strong>Additional Details</strong></td>
</tr>
<tr>
<td>RCE Subscription</td>
<td>1. In the Remote Server URL field, specify the URL of the RCE repository you want to access.</td>
<td>By default, the Remote Server URL field displays <a href="https://update.novell.com/data">https://update.novell.com/data</a>.</td>
</tr>
<tr>
<td></td>
<td>2. Browse to and select the remote server credential from the Credential Lookup dialog box.</td>
<td></td>
</tr>
<tr>
<td>RHN Subscription</td>
<td>1. In the Remote Server URL field, specify the URL of the RHN repository you want to access.</td>
<td>By default, the Remote Server URL field displays <a href="https://xmlrpc.rhn.redhat.com/XMLRPC">https://xmlrpc.rhn.redhat.com/XMLRPC</a>.</td>
</tr>
<tr>
<td></td>
<td>2.Browse to and select the systemid file from the Upload Content dialog box.</td>
<td></td>
</tr>
<tr>
<td>RPM-MD Subscription</td>
<td>1. In the Remote Server URL field, specify the URL of the RPM-MD (YUM) repository you want to access.</td>
<td>The following platforms are available:</td>
</tr>
</tbody>
</table>
|                   | 2. Browse to and select the remote server credential from the Credential Lookup dialog box. |   * SLES 10  
   * SLED 10  
   * SLES 11  
   * SLED 11  
   * RHEL 4  
   * RHEL 5 |
|                   | 3. Select a platform from the drop-down list to download the subscriptions. | |
| Static Subscription | 1. Specify the location of the file system from which to download the content. | If you are replicating content from a ZENworks 11 Server, by default the static source location is /var/opt/novell/zenworks/cache/pkg-repo/Static_Subscriptions on Linux and %ZENWORKS_HOME%/work/cache/pkg-repo\Static_Subscriptions on Windows. However, if you have copied the static source to a specific location, you must specify that path to import the content. |
|                   | 2. Click Add Source to display the Select Source dialog box. | |
|                   | The Select Source dialog box displays all the available sources that are enabled for static replication. | |
|                   | 3. Select the source from which to download the content, then click OK. | |
| SUSE Subscription  | 1. In the Remote Server URL field, specify the URL of the SUSE customer center REST API to find out the list of repositories for organizations. | By default, the Remote Server URL field displays: |
|                   | 2. Browse to and select the remote server credential from the Credential Lookup dialog box. | https://scc.suse.com/connect/organizations/repositories |
6 Click Next to display the Certificate Details page, if the remote server certificate is not trusted. When you trust the remote server certificate, the certificate is stored in the database. When you try to connect to the same remote server, you won’t be prompted for the certificate again.

7 Click Next to display the Select Catalogs and Categories for Download page.

Based on your credentials, the Select catalogs and categories for download page lists the catalogs that you are entitled to download. By default, all the catalogs are selected.

8 Select the catalogs that you want to replicate.

9 For each of the selected catalogs, click the Catalog Name link to display the Edit Catalog dialog box, then select the targets to download.

By default, all the targets of a catalog are selected.

10 Deselect the targets and the categories that you do not want to download.

**NOTE:** The categories are not applicable for RHN and ZLM subscriptions.

11 (Optional) Specify a local name for the catalog in the Local Catalog Name field.

12 Click OK to return to the Select catalogs and categories for download page.

13 Click Next to display the Schedule Download page.

14 Select a schedule from the drop-down list to assign to the subscription. The available schedule types are No Schedule, Date Specific, and Recurring.

For more information on schedules, see “Schedule Types”.

15 In the Subscription Server field, type the name or browse for and select the server to which you want to replicate the catalogs.

16 Click Next to display the Summary page.

Review the information, making any changes to the settings by using the Back button as necessary.

17 (Conditional) Select the Define Additional Properties check box to display the subscription’s Summary page after the wizard finishes.

---

<table>
<thead>
<tr>
<th>Subscription Type</th>
<th>Task</th>
<th>Additional Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>ZLM Subscription</td>
<td>1. Specify the ZENworks Linux Management server’s IP address from which you want to download the subscriptions as https://ZLM_Server_Address. 2. Browse to and select the remote server credential from the Credential Lookup dialog box.</td>
<td>Before you can download the catalogs from the ZENworks Linux Management Server to your managed device, you must first assign the catalogs to the managed device. Any managed device to which you want to download the subscriptions from the ZENworks Linux Management Server must be registered to the ZENworks Linux Management Server. The managed device must use its deviceid and secret as its username and password to gain access to the ZENworks Linux Management Server.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
You can use the various tabs on the Summary page to edit the subscription information. For example, you can edit the description of the subscription and the base URL of the Remote Server, apply various options, and schedule the subscription.

For more information on these additional properties, see .

Click Finish to create the subscription.

Creating a Red Hat Subscription by Using nu.novell.com

1 In ZENworks Control Center, click the Configuration tab.

2 In the Credential Vault panel, create a credential that can download Red Hat patches from the Novell Update server (nu.novell.com).

For more information on the Credential Vault, see “Using the Credential Vault”

3 Click the Subscriptions tab.

4 In the Subscriptions list, click New, then click Subscription to display the Select Subscription Type page.

5 Select the RPM-MD Subscription, then click Next to display the Define Details page.

6 Specify the name of the subscription and provide a short description, then click Next to display the Define Remote Server Details page.

7 In the Remote Server URL field, specify one of the following URLs according to the distribution for which you want to download the patches:
   - RHEL 4 Server 32-bit: https://nu.novell.com/repo/$RCE/RES4/i386
   - RHEL 4 Server 64-bit: https://nu.novell.com/repo/$RCE/RES4/x86_64
   - RHEL 5 Server 64-bit: https://nu.novell.com/repo/$RCE/RES5/x86_64

8 In the Remote Server Credentials field, select the credential that can download Red Hat patches.

9 From the drop-down list, select the platform to download the subscriptions, then click Next.

10 Click Next to display the Certificate Details page, if the remote server certificate is not trusted.

   When you trust the remote server certificate, the certificate is stored in the database. When you try to connect to the same remote server, you won’t be prompted for the certificate again.

11 Click Next to display the Select Catalogs and Categories for Download page.

   Based on your credentials, the Select Catalogs and Categories for Download page lists the catalogs that you are entitled to download.

12 Select the RPM-MD catalogs that you want to replicate.

13 For each of the selected catalogs, click the Catalog Name link to display the Edit Catalog dialog box, then select the targets to download.

   By default, all the targets of a catalog are selected.

14 Deselect the targets and the categories that you do not want to download.

   The categories are not applicable for RHN and ZLM subscriptions.

15 (Optional) Specify a local name for the catalog in the Local Catalog Name field.

16 Click OK to return to the Select Catalogs and Categories for Download page.
Click Next to display the Schedule Download page.

Select a schedule to assign to the subscription from the drop-down list. The available schedule types are No Schedule, Date Specific, and Recurring.

For more information on schedules, see “Schedule Types”.

In the Subscription Server field, type the name or browse for and select the server to which you want to replicate the catalogs.

Click Next to display the Summary page.

Review the information, making any changes to the settings by using the Back button as necessary.

(Conditional) Select the Define Additional Properties check box to display the subscription’s Summary page after the wizard finishes.

You can use the various tabs on the Summary page to edit the subscription information.

For example, you can edit the description of the subscription and the base URL of the Remote Server, apply various options, and schedule the subscription.

For more information on these additional properties, see .

Click Finish to create the subscription.

Creating Subscriptions by using the zman Command Line Utility

ZENworks Configuration Management allows you to create different types of subscriptions. Each subscription has its own set of data and configuration settings. Because it is difficult to pass the data as arguments in the command line, the zman utility requires XML files as an input to create subscriptions. To use the zman command line utility to create a subscription, you must have a subscription of the same type already created through ZENworks Control Center and export it to XML. You then use the exported XML file as a template to create subscriptions with zman.

For example, you can export a Novell Subscription already created through ZENworks Control Center into an XML file, then use it to create another Novell Subscription with zman.

1 Create a subscription in ZENworks Control Center.

For example, create a Novell Subscription called NU that accesses the Novell Updates (https://nu.novell.com/repo) repository.

For more information on how to create subscriptions by using ZENworks Control Center, see .

2 Export the subscription created in Step 1 to an XML file by using the following command:

zman subscription-export subscription_name subscription_data.xml

For example, export the NU subscription to NU.xml by using zman subscription-export NU NU.xml.

If you want to create the subscription with new data, continue with Step 3. If you want to create the subscription with the same data as the NU subscription, skip to Step 4.

3 To create a subscription with new data, modify the XML file according to your requirements.

For example, change the value of <Base> from https://nu.novell.com/repo to the URL of the repository you want to access in the <RemoteServer> section of the XML file as shown below:
4 To create a new subscription, with the same data as the template, use the following command:

```
zman subscription-create new_subscription_name subscription_xml_filename.xml
```

For example, to create NU1 subscription, run the `zman subscription-create NU1 NU.xml` command.
Managing Subscriptions

The Subscriptions feature allows you to effectively manage the software content in your ZENworks system.

- “Creating Folders” on page 19
- “Renaming, Copying, or, Moving Subscriptions” on page 20
- “Editing Subscriptions” on page 20
- “Replicating Content” on page 25
- “Enabling or Disabling Subscriptions” on page 28
- “Deleting Subscriptions and Subscription Folders” on page 28

Creating Folders

A folder is an organization object that is displayed in ZENworks Control Center. You can use folders to structure your subscriptions in a manageable hierarchy for your ZENworks system. For example, you might want a folder for each type of subscription (Novell Subscription, RCE Subscription, RHN Subscription, and so forth).

1. In ZENworks Control Center, click the Subscriptions tab.
2. Click New > Folder.
   The New Folder dialog box is displayed.
3. Fill in the fields:
   - **Name**: Provide a unique name for the folder.
   - Ensure that the name adheres to the naming conventions; not all characters are supported. For more information on naming conventions, see “Naming Conventions in ZENworks Control Center”.
   - **Folder**: Type the name or browse to the folder that contains this folder in the ZENworks Control Center interface.
   - **Description**: Provide a short description of the folder’s contents.
4. Click OK.
Renaming, Copying, or, Moving Subscriptions

Depending on the type of object you select to edit, you can rename, copy, or move the object. For example, if you select a Subscription object, you can rename, copy, and move the subscription. If you select a Subscription folder, you can rename or move the folder, but not copy it. If an option is dimmed, that option is not available for the selected object type.

Some actions cannot be performed on multiple objects. For example, if you select multiple objects, the Rename option is not available from the Edit menu.

1 In ZENworks Control Center, click the Subscriptions tab.
2 In the Subscriptions list, select the check box next to the subscription’s name or folder, then click Edit.
3 Select an option:
   **Rename**: Click Rename, provide a new name for the folder, then click OK.
   **Copy**: Click Copy, provide a new name for the copy, then click OK.
   The copy option is useful to create a new subscription that is similar to an existing subscription. You can copy a subscription and then edit the new subscription's settings.
   **Move**: Click Move, choose a destination folder for the selected objects, then click OK.

Editing Subscriptions

You can edit an existing subscription to add additional properties, to change its description, add or remove the subscription from a subscription folder, add or remove packages from the bundle, and more.

You can use ZENworks Control Center or the zman command line utility to edit subscriptions. The following procedure explains how to edit a subscription by using ZENworks Control Center. If you prefer the zman command line utility, see

1 In ZENworks Control Center, click the Subscriptions tab.
2 Click the subscription name you want to edit to display the Summary page.
   Use the Summary page to view detailed information about the selected subscription. This page provides general information about the subscription, the remote server URL and its credentials, the options that can be additionally set for a subscription, and the schedule information such as the replication schedule and status, the last replication date, and the URL of the subscription server.
   You can also use this page to edit the subscription’s description, enable or disable the subscription, and change other configuration settings as described.
3 Make the configuration changes:
   3a Review the information in the General section, then make the desired changes. You can edit only the Description, Download to Folder, and Enabled fields.
      **Name**: Displays the name of the subscription.
      **Type**: Displays the type of subscription.
      **Created By**: Displays who created the subscription.
**GUID:** Displays the subscription’s GUID (global unique identifier), which is a randomly generated string that provides a unique identifier for the subscription.

**Description:** Displays the subscription’s description if it was provided when the subscription was created. The description appears only in ZENworks Control Center.

Click **Edit** to change the description, as necessary.

**Enabled:** Displays **Yes** if the subscription is enabled, or displays **No** if the subscription is disabled.

Click the link next to the field to enable or disable the subscription, as necessary.

**Download To Folder:** Displays the folder to which to download the subscriptions. To change the folder, browse to and select a different folder. Not applicable for Android Enterprise and Apple VPP Subscription.

**NOTE:** The specified folder is not applicable when you choose to create a Static Subscription. Irrespective of the folder you specify, the subscriptions are downloaded to the following folders:

- On Windows:
- On Linux: `/var/opt/novell/zenworks/cache/pkg-repo/Static_Subscriptions`

**Subscription Logs:** Click the **View Log** link to display any warning or error messages for the subscription.

3b Review the information in the VPP Token Details section. This applicable for Apple VPP only.

- **Organization:** The name of the organization that has subscribed for the Apple VPP.
- **Country Code:** The country code of the organization that has subscribed for the Apple VPP.
- **Apple ID:** The Apple ID associated with the Apple VPP token.
- **Email:** The email address associated with the Apple VPP token.
- **Location ID** The unique location code associated with the location-based token (applicable only for Apple Business Manager).
- **Location Name** The name of the location associated with the location-based token (applicable only for Apple Business Manager).
- **Token Expiry:** The expiry date of the Apple VPP token.

3c Review the information in the Android Enterprise details section. This is applicable for Android Enterprise Subscription only.

- **Organization Name:** Displays the name of the organization.
- **Enterprise ID:** Displays the unique ID of the enterprise. This ID is automatically generated by Google.
- **Status:** Displays the status of this organization. By default, Active will be displayed as the status.
- **Email ID:** Displays the email ID with which the enterprise is enrolled.

3d The User Context section is applicable for Android Enterprise Subscription only. All the users in the selected user contexts will be allowed to enroll for the Android Enterprise Program.
3e The Languages section is applicable for Android Enterprise Subscription only. The app details will be retrieved in the selected languages from Google for the apps that you approve in managed Google Play. The retrieved details will be used to display app details in the Apps Catalog page and information within a bundle such as permissions and managed configurations. By default, English will be selected, which cannot be modified.

3f Review the Bundle Details information. This is applicable for Apple VPP Subscription and Android Enterprise Subscription only.

- **ZENworks Bundle Location**: Displays the folder location in which you want the iOS bundle to reside. To change the folder, browse and select a different folder.

- **Bundle Settings**: Displays the app settings configured while creating the subscription. Only Create Bundle as Sandbox is applicable for Android Enterprise Subscription.
  
  - **Allow ZENworks to take ownership of the app, if app is already installed on the device**: If the app is already installed on the device, this option allows ZENworks to manage the app on the device. This option is selected by default for all Apple VPP bundles.

  - **Retain app on the device after unenrolling the device from the ZENworks Management Zone**: Retains the app on the device even after it is unenrolled from the ZENworks Management Zone. The app will be retained on the device, but it will no longer be managed by ZENworks.

  - **Prevent backup to iCloud**: Prevents the backup data from getting synced with iCloud. You will not be able to retrieve the app data if the device has unenrolled from the ZENworks Management Zone.

  - **Create Bundle as Sandbox**: Creates a Sandbox-only version of the bundle. A Sandbox version of a bundle enables you to test it on your device before actually deploying it.

3g Review the information in the Remote Server section, then make the desired configuration changes:

- **Base URL**: Displays the URL of the repository that you want to access and the server credentials that you provided while configuring the remote server for the subscription. Click **Edit** to provide a different URL.

- **Server Credentials**: Displays the server credentials that you provided while configuring the remote server for the subscription. To change the credential, browse to and select a different credential.

3h Select the common options, Kernel Package Install type options and the bundle options that you want to additionally set for the subscription:

- **Common Options**: The following common options are available for the subscription.

  - **Dry Run**: Select this option to perform a test to determine if the content can be successfully downloaded. A successful dry run ensures that the content can be successfully downloaded to the server and the bundle can be successfully created.

  - **Force Replication**: Select this option to re-download the packages from the repository if they are corrupted on the ZENworks Server.

  - **Create Sandbox**: Select this option to replicate the bundle as a sandbox version. A sandbox version of a bundle enables you to test it on your device before you actually replicate it.
• **RollBack Installation of Bundles on Failure:** Select this option to revert the transaction to its original state (before the bundles were installed).

**Kernel Package Install type options:** The following Kernel Package install type options are available for the subscription. The selected option will be set for Kernel Packages during replication.

• **Install:** Select this option to set the install type option for Kernel Packages as **Install**.

• **Upgrade:** Select this option to set the install type option for Kernel Packages as **Upgrade**.

**Bundle Options:** The following bundle options are available for the subscription.

• **Static Replication:** Select this option to perform a static replication to download the package updates from the remote repository to the file system on your local server. On Linux, the default location to download the content from is `/var/opt/novell/zenworks/cache/package-repo/Static-Subscription`, and on Windows, the default location is `%ZENWORKS_HOME%\work\cache\pkg-repo\Static_Subscriptions`.

• **Monolithic Bundle:** This option is selected by default for RCE, YUM, and Static repositories. Monolithic bundles are applicable only for NU, RCE, YUM, and Static repositories.

  If you are replicating from a ZLM repository that has multiple bundles, selecting this option creates the same number of bundles as are in the ZLM catalog. If you are replicating content from a repository other than a ZLM repository, selecting this option creates a single bundle.

• **Source RPMs:** Select this option to download the source RPMs, if they are available in the remote repository, to the monolithic bundle.

• **Patches:** Select this option to download patches to the local file system. Patches are applicable only for NU, RCE, and YUM.

  A monolithic bundle is replicated along with patches. However, the monolithic bundle is skipped if all categories are not selected or the bundle filter is configured.

• **Retain Bundle GUID:** This option is applicable only for ZLM Subscriptions and Static subscriptions created with the ZENworks Linux Management static source.

  Select this option to prevent the bundle from being reinstalled on managed devices that are migrated from ZENworks Linux Management to ZENworks Configuration Management.

• **Create Linux Bundle:** This option is selected by default for NU and RCE repositories. Select this option to create a Linux bundle on the ZENworks server.

  • **Monolithic Bundle:** This option is applicable only for NU, RCE, YUM, and Static repositories and is selected by default.

    If you are replicating from a ZLM repository that has multiple bundles, selecting this option creates the same number of Linux bundles as are in the ZLM catalog. If you are replicating from a repository other than a ZLM repository, selecting this option creates a single Linux bundle.

  • **Source RPMs:** Select this option to download the source RPMs to the bundle.
- **Patches:** This option is applicable only for NU, RCE, YUM, and Static repositories and is selected by default for the NU and RCE repositories. Select this option to create patch bundles and download the patches to these bundles.

  A monolithic bundle is replicated along with patches. However, the monolithic bundle is skipped if all categories are not selected or if the bundle filter is configured.

  **NOTE:** Patch replication might not work for all YUM repositories. YUM, as an open format allows defining of repository patch metadata in different formats. As a result, the format of repositories published by different vendors for different distributions, varies. Subscription replication might not be able to handle all formats, because there is no consistent formatted patch metadata.

- **Create Category based Bundle Groups:** Select this option to create different bundle groups for the replicated bundles based on their categories.

- **Retain Bundle GUID:** This option is applicable only for ZLM subscriptions and Static subscriptions created with the ZENworks Linux Management static source.

  Select this option to prevent the bundle from being reinstalled on managed devices that are migrated from ZENworks Linux Management to ZENworks Configuration Management.

- **Create Linux Dependency Bundle:** Select this option to create a Linux Dependency bundle on your ZENworks server.

  If you are replicating from a ZLM repository that has multiple bundles, selecting this option creates the same number of Linux dependency bundles as are in the ZLM catalog. If you are replicating from a repository other than a ZLM repository, selecting this option creates a single Linux dependency bundle.

- **Publish Packages:** Select this option to allow the user on the ZENworks agent to directly install the packages on the agent by using the zac command. If you do not select this option, the packages are used for dependency resolution in other Linux bundles.

  3i Review the information in the Schedule section, then make the desired configuration changes:

  **Status:** Displays the subscription status.

  Click **Run Now** to begin the subscription immediately.

  **Last Replication:** Displays the date on which the content was last replicated.

  **Subscription Server:** Displays the complete path of the ZENworks Primary Server to which you are downloading the content. To change the server, browse to and select a different server.

  **Replication Schedule:** Displays the schedule type that you set up while creating the subscription. Select a different schedule type from the drop-down list or edit the existing one, as necessary.

  **Bundle Creation Schedule:** Displays the schedule type that you set up while creating an iOS bundle. You can select a different schedule type from the drop-down list or edit the existing one. Applicable for Apple VPP only.

  For more information on schedules, see “Schedule Types” in the ZENworks Primary Server and Satellite Reference.
MDM Server: Displays the name of the MDM server through which the enterprise last connected to Google.

3j Click Apply to save any changes.

Replicating Content

- “Starting a Replication” on page 25
- “Canceling a Replication” on page 26
- “Suspending a Replication” on page 26
- “Resuming a Suspended Replication” on page 27

Starting a Replication

You can start a replication in one of the following ways:

- “Using ZENworks Control Center to Start a Replication” on page 25
- “Using the zman Command to Start the Replication” on page 25

Using ZENworks Control Center to Start a Replication

To immediately start the replication:

1. Log in to ZENworks Control Center.
2. Click Configuration > Subscriptions.
3. Select the check box next to the subscription that you want to run.
4. Click Quick Tasks in the menu, then click Run Now.

To schedule the replication:

1. In ZENworks Control Center, click Configuration > Subscriptions.
2. Click the subscription link in the Name column to display the subscription’s Summary page.
3. In the Schedule pane, select a schedule type to start the replication. The available schedule types are No Schedule, Date Specific, and Recurring.
   - If you select No Schedule, then click Run Now, the replication starts immediately.
   - For more information on schedules, see “Schedule Types”.

Using the zman Command to Start the Replication

You can use the following command to begin the replication:

zman subscription-replicate subscription_name destination_folder_path options

For more information on this command, see “Subscription Commands”.
Canceling a Replication

You can cancel a replication that is in an InProgress or Suspended state. When you cancel a replication, the Status column for the subscription displays Canceled on the Subscription page.

The packages that are already downloaded to the cache are automatically deleted when you cancel the replication.

If you cancel a replication when a bundle creation is in progress, the replication is canceled only after the bundle is created.

You can cancel a replication in any of the following ways:

- Using the Action Menu to Cancel a Replication
- Editing the Subscription to Cancel a Replication
- Using the zman command to Cancel a Replication

Using the Action Menu to Cancel a Replication

1. In ZENworks Control Center, click Configuration > Subscriptions.
2. Select the check box next to the subscription that you want to cancel.
3. Click Action > Cancel.

Editing the Subscription to Cancel a Replication

1. In ZENworks Control Center, click Configuration > Subscriptions.
2. In the Subscriptions list, click the subscription link of the subscription that you want to cancel.
   The Subscription’s Summary page is displayed.
3. If the replication status is In Progress or Suspended, click the View Log link in the General pane.
   The Subscription Log Details dialog box is displayed.
4. Click Cancel Replication to cancel the replication.

Using the zman command to Cancel a Replication

To cancel a replication, run the following command:

```
zman subscription-replication-status subscription_name --cancel
```

For more information on this command, see “Subscription Commands”.

Suspending a Replication

You can suspend a replication to temporarily stop the replication that is in progress. The packages that are already downloaded to the cache are not deleted when you suspend the replication.

You can suspend a replication that is in an InProgress state. When you suspend a replication, the Status column for the suspended subscription displays Suspended on the Subscription page.

If you suspend a replication when a bundle creation is in progress, the replication is suspended only after the bundle is created.
You can suspend a replication in any of the following ways:

- “Using the Action Menu to Suspend a Replication” on page 27
- “Editing the Subscription to Suspend a Replication” on page 27
- “Using the zman Command to Suspend a Replication” on page 27

### Using the Action Menu to Suspend a Replication

1. In ZENworks Control Center, click **Configuration > Subscriptions**.
2. Select the check box next to the subscription that you want to suspend.
3. Click **Action > Suspend**.

### Editing the Subscription to Suspend a Replication

1. In ZENworks Control Center, click **Configuration > Subscriptions**.
2. In the Subscriptions list, click the subscription that you want to suspend.
   - The Subscription’s Summary page is displayed.
3. If the replication status is **In Progress**, click the **View Log** link in the General pane.
   - The Subscription Log Details dialog box is displayed.
4. Click **Suspend Replication** to suspend the replication.

### Using the zman Command to Suspend a Replication

To suspend a replication, run the following command:

```bash
zman subscription-replication-status subscription_name --suspend
```

For more information on this command, see “Subscription Commands”.

### Resuming a Suspended Replication

When you resume a replication, it proceeds from where it was stopped. If a schedule is attached to the subscription, the replication resumes based on the specified schedule.

1. In ZENworks Control Center, click **Configuration > Subscriptions**.
2. Select the check box next to a suspended replication that you want to resume.
3. Click **Quick Tasks > Run Now**.

To resume a replication, you can also use the **Run Now** link in the Schedule pane on the subscription’s Summary page.
Enabling or Disabling Subscriptions

When you create a subscription in ZENworks Configuration Management, the subscription is enabled by default. You can, however, disable the subscriptions. If you disable a subscription, you cannot use it to replicate content until you enable it again.

- “Disabling Subscriptions” on page 28
- “Enabling the Disabled Subscriptions” on page 28

Disabling Subscriptions

1. In ZENworks Control Center, click the Subscriptions tab.
2. Select the check box next to the subscriptions that you want to disable.
3. Click Action > Disable Subscription.

In the Subscriptions list, the status for the selected subscriptions in the Enabled column is changed to No.

Enabling the Disabled Subscriptions

1. In ZENworks Control Center, click the Subscriptions tab.
2. Select the check box next to the subscriptions that you want to enable.
3. Click Action > Enable Subscription.

In the Subscriptions list, the status for the selected subscriptions in the Enabled column is changed to Yes.

Deleting Subscriptions and Subscription Folders

If you delete a folder that contains subscriptions, both the folder and its subscriptions are removed and are not displayed on the Subscriptions page in ZENworks Control Center.

To delete a subscription or a subscription folder:

1. In ZENworks Control Center, click the Subscriptions tab.
2. In the Subscriptions list, select the check box next to the objects that you want to delete.
3. Click Delete.

The Delete Subscriptions dialog box is displayed.

4. If you want to delete the bundles created by the subscription, select the Delete the bundles created by the subscriptions check box.
5. Click OK.
Verifying the Remote Server Certificate

The Subscriptions feature allows you to import the remote server certificate in your ZENworks system.

- “Importing the Untrusted Certificates by Using ZENworks Control Center” on page 29
- “Importing the Untrusted Certificates by Using the zman Command Line Utility” on page 30
- “Update the Existing Remote Server Certificate” on page 30

Importing the Untrusted Certificates by Using ZENworks Control Center

While you are creating a subscription, if the connection to the remote server uses a secure connection but the remote server certificate is not trusted, you must use the remote server SSL certificate.

To import the untrusted certificate:

1. In ZENworks Control Center, click Configuration > Subscriptions.
2. In the Subscriptions list, click New, then click Subscription to display the Select Subscription Type page.
3. Select the subscription type that you want to create, then click Next to display the Define Details page.
4. Specify the subscription details, then click Next.
5. On the Define the Remote Server details page, specify a secure URL (HTTPS) that you want to access, then click Next.
   If the remote server certificate is not trusted, then the Certificate Details page is displayed.
   NU and RCE subscriptions do not prompt you to trust the certificate details because the certificate is stored in the database.
   After you upgrade ZENworks versions, if the remote server certificate is not trusted for the RPM-MD, RHN, and ZLM subscriptions, subscription replication might fail.
6. If the Certificate Details page prompts you to trust the certificate, select to trust it, then click Next.
   The Select Catalogs and Categories for Download page lists the catalogs that you are entitled to download. By default, all the catalogs are selected.
7. Click Next to display the
8. Schedule Download page.
9. Select a schedule type from the drop-down list to assign to the subscription. The available schedule types are No Schedule, Date Specific, and Recurring.
   For more information on schedules, see “Schedule Types”.
10. Click Next to display the Summary page.
Review the information, then make any changes to the settings by using the Back button, as necessary.

Click Finish to create the subscription.

Importing the Untrusted Certificates by Using the zman Command Line Utility

To import the certificate while creating a subscription, run the following command:

```
zman src <subscription-name> <subscription-data.xml> --
certFilePath=<remote-server-cert.cer>
```

Update the Existing Remote Server Certificate

If the remote server’s certificate is modified, you can add the modifications to the certificate that is in your system.

1 In ZENworks Control Center, click Configuration > Subscriptions.

2 Click the subscription for which you want to update the existing trusted certificate of the remote repository.

   The Summary page is displayed.

3 In the Remote Server panel, click the Update Certificate link in Base URL.

   The Certificate Details page is displayed if the remote server certificate is not trusted and needs to be updated.

4 Click Yes to accept the new certificate.