

# Channels en Repositories in Spacewalk

Nadat je [een Spacewalk server hebt geïnstalleerd](#) moet je deze nog van channels voorzien.

Het verdient aanbeveling even goed na te denken over de layout van je channels.

mijn setup ziet er zo uit :

```
centos_6-base
├─ centos_6-extras
├─ centos_6-updates
└─ epel_6

centos_7-base
├─ centos_7-extras
├─ centos_7-updates
└─ epel_7
```

## Base channel

[Maak een base channel aan door in het boven menu Channels](#) te kiezen en vervolgens in het zij menu **Manage Software Channels** en druk op het blauwe **+ Create Channel**

The screenshot shows the Spacewalk web interface. The top navigation bar includes links for Knowledgebase, Documentation, and user 'admin'. A search bar is present with 'Systems' selected. The main navigation menu has tabs for Overview, Systems, Errata, Channels (selected), Audit, and Configuration. Below this, there are buttons for '0 systems selected', 'Manage', and 'Clear', along with links for 'Schedule' and 'Users'. The left sidebar contains a tree view with 'Manage Software Channels' highlighted. The main content area is titled 'Software Channel Management' and includes links for '+ Create Channel' and 'Clone Channel'. It states that no software channels are currently owned by the organization and provides instructions on how to manage or create channels. A table with columns 'Channel Name' and 'Packages' is shown, containing the text 'No channels found.' The footer contains copyright information for Red Hat, Inc. and links to privacy and legal statements.

| Channel Name       | Packages |
|--------------------|----------|
| No channels found. |          |

Vul de naam en label in, geen idee waarom er twee zijn, maar volgens de instructies moget er in geen van beide hoofdletters of spaties. Hou ze voor het gemak gelijk.

The screenshot shows the Spacewalk web interface. The top navigation bar includes links for Knowledgebase, Documentation, and user roles (admin, etc.). Below this is a search bar and a main menu with options like Overview, Systems, Errata, Channels (selected), Audit, Configuration, and buttons for '0 systems selected', 'Manage', and 'Clear'. A secondary menu shows 'Admin' and 'Help'. On the left, a sidebar lists navigation options: Software Channels, Package Search, Manage Software Channels (highlighted), Manage Software Packages, Manage Repositories, and Distribution Channel Mapping. The main content area is titled 'Create Software Channel' and 'Basic Channel Details'. It provides instructions on creating or editing channels, including rules for channel names and labels. The form contains several fields: 'Channel Name\*' (filled with 'centos\_7-x86\_64'), 'Channel Label\*' (filled with 'centos\_7-x86\_64'), 'Parent Channel:' (set to 'None'), 'Architecture:' (set to 'x86\_64'), 'Yum Repository Checksum Type:' (set to 'sha1'), and 'Channel Summary\*' (filled with 'Base Channel for CentOS 7'). A tip at the bottom explains the checksum types.

**Create Software Channel**

### Basic Channel Details

Create or edit software channels from this page.  
If the parent channel is set to 'none', the channel is a base channel. Otherwise, the channel is a child of the specified channel.

Channel name and label are required.  
They each must be at least 6 characters in length.  
Channel name must not be longer than 256 characters and channel label must not be longer than 128 characters.  
Channel name must begin with a letter and channel label may begin with a letter or digit.  
They each must not begin with rhn, redhat or red hat.  
They each must contain only lowercase letters, hyphens ('-'), periods ('.'), underscores ('\_'), and numerals.  
Channel name may also contain spaces, parentheses () and forward slashes ('/').

Channel summary is also required and must not exceed 500 characters.

**Channel Name\*:**  
centos\_7-x86\_64

**Channel Label\*:**  
centos\_7-x86\_64

**Parent Channel:**  
None

**Architecture:**  
x86\_64

**Yum Repository Checksum Type:**  
sha1

**Tip:** sha1 offers the widest compatibility with clients. sha-256 offers higher security, but is compatible only with newer clients: Fedora 11 and newer, or Enterprise Linux 6 and newer.

**Channel Summary\*:**  
Base Channel for CentOS 7

Scroll naar beneden, daar moet de GPG informatie worden ingevuld waar de rpm's uit de repository mee gesigned zijn.

Je krijgt deze informatie het eenvoudigst door de gpg-key te downloaden naar een linux machine, de spacewalk server zelf is een prima optie aangezien in afgeschermd omgevingsen dit überhaupt de enige server is die met de repo server die als bron gekozen is kan communiceren.

installeer wget :yum install wget

haal de gpgkey op:

```
cd /tmp
```

```
wget
```

```
http://ftp.nluug.nl/ftp/pub/os/Linux/distr/CentOS/7/os/x86_64/RPM-GPG-KEY-CentOS-7
```

en haal de nodige gegevens uit de key door:

```
gpg --with-fingerprint RPM-GPG-KEY-CentOS-7
```

de output ziet er ongeveer zo uit. Het gataal na de slash is het key ID

```
pub 4096R/F4A80EB5 2014-06-23 CentOS-7 Key (CentOS 7 Official Signing Key)
<security@centos.org>
    Key fingerprint = 6341 AB27 53D7 8A78 A7C2 7BB1 24C6 A8A7 F4A8 0EB5
```

[vul dit in en druk op](#) **Create Channel:**

## Channel Access Control

**Per-User Subscription Restrictions:**

☒ All users within your organization may subscribe to this channel.

☐ Only selected users within your organization may subscribe to this channel.

**Organization Sharing:**

☒ This channel is **private** and cannot be accessed by any other organization.

☐ This channel is **protected** and may only be accessed by specific [trusted organizations](#).

☐ This channel is **public** and may be accessed by any of the [trusted organizations](#) trusted by this organization.

## Security: GPG

**GPG key URL:**

**GPG key ID:**

Example: DB42A60E

**GPG key Fingerprint:**

Example: CA20 8686 2BD6 9DFC 65F6 ECC4 2191 80CD DB42 A60E

[Create Channel](#)

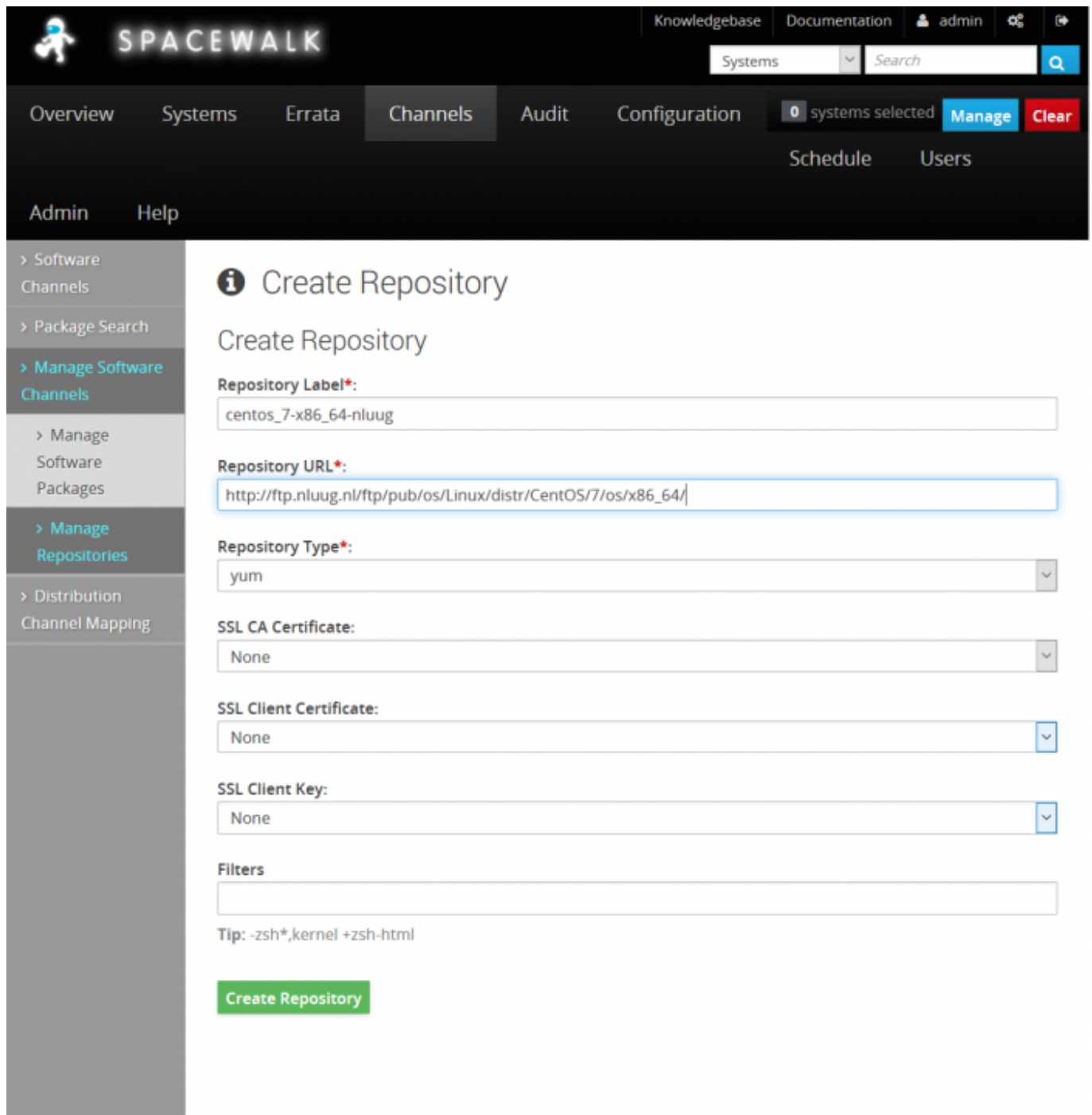
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nu is het tijd om een repository aan te maken, aan het channel te koppelen en te syncen met de upstream. kies in het zij menu **Manage Repositories** en druk rechs boven op **+Create Repository**

[vul vervolgens de velden in en druk op Create Repository:](#)



The screenshot shows the Spacewalk web interface. The top navigation bar includes links for Knowledgebase, Documentation, and user settings (admin). A search bar is present with the text 'Systems' and a search icon. Below this is a main navigation menu with tabs: Overview, Systems, Errata, Channels (selected), Audit, Configuration, 0 systems selected, Manage, and Clear. Further down are links for Admin and Help. On the left side, there is a sidebar menu with options: > Software Channels, > Package Search, > Manage Software Channels (highlighted), > Manage Software Packages, > Manage Repositories, and > Distribution Channel Mapping. The main content area is titled 'Create Repository' with an information icon. It contains several form fields: 'Repository Label\*' with the value 'centos\_7-x86\_64-nluug', 'Repository URL\*' with the value 'http://ftp.nluug.nl/ftp/pub/os/Linux/distr/CentOS/7/os/x86\_64/', 'Repository Type\*' with a dropdown menu showing 'yum', 'SSL CA Certificate' with a dropdown menu showing 'None', 'SSL Client Certificate' with a dropdown menu showing 'None', and 'SSL Client Key' with a dropdown menu showing 'None'. There is also a 'Filters' section with an empty text input field. Below the filters, a tip is displayed: 'Tip: -zsh\*,kernel +zsh-html'. At the bottom of the form is a green button labeled 'Create Repository'.

Vervolgt stap is de repository aan het channel koppelen. In **Manage Software Channels** klik op de channel waar de repository bij hoort, kies het tabblad **Repositories** selecteer de net gemaakte repository en druk op **Update Repositories**

The screenshot shows the Spacewalk web interface. The top navigation bar includes links for Knowledgebase, Documentation, and user settings. The main navigation bar has tabs for Overview, Systems, Errata, Channels (selected), Audit, Configuration, and a summary for 0 systems selected. The left sidebar contains a tree view with options like Software Channels, Package Search, Manage Software Channels (selected), Manage Software Packages, Manage Repositories, and Distribution Channel Mapping. The main content area displays the 'centos\_7-x86\_64' channel details. A notification at the top indicates that the repository information was successfully updated. The 'Repositories' tab is active, showing a list of repositories. The 'centos\_7-x86\_64-nluug' repository is selected. The 'Update Repositories' button is located at the bottom right of the repository list.

Vervolgens is het tijd om het channel te syncen met de upstream repository. Log in op de spacewalk server en doe:

```
spacewalk-repo-sync -c centos_7-x86_64
```

Dit kan overigens even duren.

```
07:15:26 =====
07:15:26 | Channel: centos_7-x86_64
07:15:26 =====
07:15:26 Sync of channel started.
07:15:26 Repo URL:
http://ftp.nluug.nl/ftp/pub/os/Linux/distr/CentOS/7/os/x86_64/
07:15:29 Packages in repo:          9363
07:15:48 Packages already synced:    0
07:15:48 Packages to sync:          9363
```

```
07:15:48 1/9363 : 389-ds-base-1.3.5.10-11.el7-0.x86_64
07:16:19 2/9363 : 389-ds-base-devel-1.3.5.10-11.el7-0.x86_64
07:16:20 3/9363 : 389-ds-base-libs-1.3.5.10-11.el7-0.x86_64
...

...
14:30:07 9361/9363 : zziplib-devel-0.13.62-5.el7-0.x86_64
14:30:16 9362/9363 : zziplib-devel-0.13.62-5.el7-0.i686
14:30:18 9363/9363 : zziplib-utils-0.13.62-5.el7-0.x86_64
14:30:19 Linking packages to channel.
14:30:30 Repo http://ftp.nluug.nl/ftp/pub/os/Linux/distr/CentOS/7/os/x86_64/
has comps file comps.xml.
14:30:30 Repo http://ftp.nluug.nl/ftp/pub/os/Linux/distr/CentOS/7/os/x86_64/
has 0 errata.
14:30:30 Sync of channel completed in 7:15:04.
14:30:30 Total time: 7:15:04
```

Om de local channel up to date te houden moet je nog een synchronisatie instellen. Klik op **Manage Software Channels** kies het tabblad **Repositories** en daaronder **Sync**.

[Selecteer Sync only latest packages](#) en stel een dagelijkse sync rond 5:00AM in:



> Software Channels

> Package Search

> Manage Software Channels

> Manage Software Packages

> Manage Repositories

> Distribution Channel Mapping

centos\_7-x86\_64

Delete software channel

Details

Managers

Errata

Packages

Repositories

Add / Remove

Sync

Channel Repositories

Last Sync Time

2017-02-11 20:30:30 CET

0 1 2 3 4 5 6 7 8 9

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

1 - 1 of 1

25 items per page

| Repository            | Sync Status |
|-----------------------|-------------|
| centos_7-x86_64-nluug |             |

1 - 1 of 1

☐ Do not sync errata

☒ Sync only latest packages

☐ Create kickstartable tree

☐ Terminate upon any error

Sync Now

Select a schedule:

☐ Disable Schedule

☒ Daily

at

5:00 am

CET

4:30 am

5:00 am

5:30 am

6:00 am

6:30 am

☐ Weekly

Every

Sun

at

6:00 am

CET

☐ Monthly

Day

1

at

1:27 pm

CET

☐ Custom Quartz format

Schedule

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Elk Base channel heeft een activation key nodig om later clients te kunnen verbinden. Maak een key aan door in het top menu **Systems** te kiezen en vervolgens in het zij menu **Activation Keys**

The screenshot shows the Spacewalk web interface. The top navigation bar includes links for English (change), Knowledgebase, Documentation, and user 'admin'. A search bar is present with 'Systems' selected. The main navigation menu has 'Overview', 'Systems' (selected), 'Errata', 'Channels', 'Audit', and 'Configuration'. A secondary menu shows '0 systems selected' with 'Manage' and 'Clear' buttons. The left sidebar lists various system management options, with 'Activation Keys' highlighted. The main content area is titled 'Activation Keys' and includes a '+ Create Key' button. It explains that activation keys are used to register systems. A section titled 'Universal Default' states that if a universal default key is set, systems inherit its properties. A message box indicates that no universal default key is currently set. Below this, a table titled 'All Activation Keys' shows that no keys are currently available. A tip at the bottom states that the key is the organization's universal default activation key. The footer contains copyright information for Red Hat, Inc. and links to privacy and legal statements.

Activation Keys

Activation Keys are used to register systems. Systems registered with an activation key will inherit the characteristics defined by that key.

Universal Default

If a universal default activation key is set for your organization, then systems registered to your organization will inherit the properties of that key by default without the need to explicitly specify that key during registration.

You do not currently have a universal default activation key set. To set a key as the universal default, please visit the details page of that key and check off the 'Universal Default?' checkbox.

All Activation Keys

The following activation keys have been created for use by your organization.

| Description                  | Key | Usage |
|------------------------------|-----|-------|
| No activation keys available |     |       |

\*Tip: This key is your organization's universal default activation key.

klik op **+Create Key**

## Child Channels

Child channels maak je onder een base Channel aan om repositories te ontsluiten die specifiek bij de OS release van dat Base Channel horen, zoals in dit voorbeeld de updates en de EPEL repositories.

### update child channel

Maak eerst een repository aan, dit gaat hetzelfde als de repository voor het base Channel.

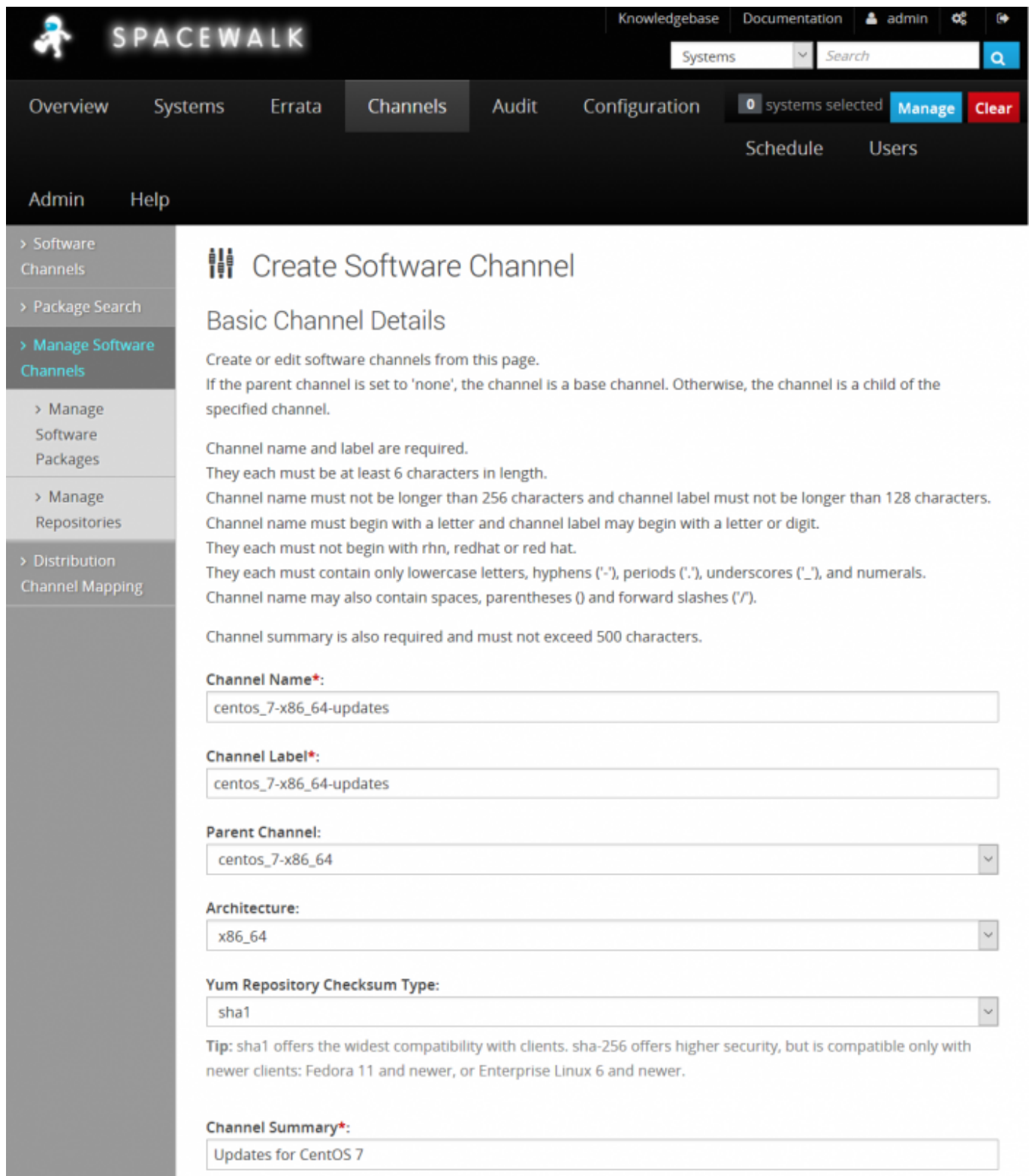
Ga naar **Channels** en kies in het zij menu **Manage Software Channels** -> **Manage Repositories** en druk op **+Create Repository**

Vul een naam in en de URL

[http://ftp.nluug.nl/ftp/pub/os/Linux/distr/CentOS/7/updates/x86\\_64/](http://ftp.nluug.nl/ftp/pub/os/Linux/distr/CentOS/7/updates/x86_64/) en druk op

## de groene knop **Create Repository**

Maak vervolgens het Child Channel aan. Ga naar **Manage Software Channels** en druk op **+Create Channel**, vul alles in en kies deze keer een **Parent Channel**



**SPACEWALK**

Knowledgebase Documentation admin

Systems Search

Overview Systems Errata **Channels** Audit Configuration 0 systems selected **Manage** **Clear**

Schedule Users

Admin Help

> Software Channels

> Package Search

> **Manage Software Channels**

> Manage Software Packages

> Manage Repositories

> Distribution Channel Mapping

## Create Software Channel

### Basic Channel Details

Create or edit software channels from this page.

If the parent channel is set to 'none', the channel is a base channel. Otherwise, the channel is a child of the specified channel.

Channel name and label are required.

They each must be at least 6 characters in length.

Channel name must not be longer than 256 characters and channel label must not be longer than 128 characters.

Channel name must begin with a letter and channel label may begin with a letter or digit.

They each must not begin with rhn, redhat or red hat.

They each must contain only lowercase letters, hyphens ('-'), periods ('.'), underscores ('\_'), and numerals.

Channel name may also contain spaces, parentheses () and forward slashes ('/').

Channel summary is also required and must not exceed 500 characters.

**Channel Name\*:**

centos\_7-x86\_64-updates

**Channel Label\*:**

centos\_7-x86\_64-updates

**Parent Channel:**

centos\_7-x86\_64

**Architecture:**

x86\_64

**Yum Repository Checksum Type:**

sha1

**Tip:** sha1 offers the widest compatibility with clients. sha-256 offers higher security, but is compatible only with newer clients: Fedora 11 and newer, or Enterprise Linux 6 and newer.

**Channel Summary\*:**

Updates for CentOS 7

De GPG keys zijn hetzelfde, vul dus dezelfde waarden in al bij het Parent Channel en druk op de groene knop **Create Channel**:

## Security: GPG

**GPG key URL:**

**GPG key ID:**

Example: DB42A60E

**GPG key Fingerprint:**

Example: CA20 8686 2BD6 9DFC 65F6 ECC4 2191 80CD DB42 A60E

[Create Channel](#)

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Ga vervolgens naar het tabblad **Repositories**, selecteer de net aangemaakte repository voor updates, en druk op **Update Repositories**

Log in op de server en doe `spacewalk-repo-sync -c centos_7-x86_64-updates`

```
14:15:16 =====
14:15:16 | Channel: centos_7-x86_64-updates
14:15:16 =====
14:15:16 Sync of channel started.
14:15:17 Repo URL:
http://ftp.nluug.nl/ftp/pub/os/Linux/distr/CentOS/7/updates/x86_64/
14:15:18 Packages in repo:          807
14:15:19 Packages already synced:    0
14:15:19 Packages to sync:            807
14:15:19 1/807 : 389-ds-base-1.3.5.10-12.el7_3-0.x86_64
14:15:31 2/807 : 389-ds-base-1.3.5.10-15.el7_3-0.x86_64
...
...
15:35:42 806/807 : zsh-5.0.2-25.el7_3.1-0.x86_64
15:35:43 807/807 : zsh-html-5.0.2-25.el7_3.1-0.x86_64
15:35:43 Linking packages to channel.
15:35:44 Repo
http://ftp.nluug.nl/ftp/pub/os/Linux/distr/CentOS/7/updates/x86_64/ has 0
errata.
15:35:44 Sync of channel completed in 1:20:27.
15:35:44 Total time: 1:20:27
```

Stel nog wel een dagelijkse sync in: Ga naar het subtabblad **Sync** selecteer **Daily**, kies een tijdstip en

druk op **schedule**

## Andere child channels

We nemen als voorbeeld de populaire EPEL repository. Nagenoeg hetzelfde als de update child channel.

Maak eerst een repository aan, ga naar **Channels** en kies in het zij menu **Manage Software Channels** -> **Manage Repositories** en druk op **+Create Repository**

Vul een naam in `epel_7-x86_64-nluug` en de URL

[http://ftp.nluug.nl/pub/os/Linux/distr/fedora-epel/7/x86\\_64/](http://ftp.nluug.nl/pub/os/Linux/distr/fedora-epel/7/x86_64/) en druk op de groene knop **Create Repository**

Maak vervolgens het Child Channel aan `epel_7-x86_64`. Ga naar **Manage Software Channels** en druk op **+Create Channel**, vul alles in en kies deze keer een **Parent Channel** in dit geval `centos_7-x86_64`

De GPG key moet je weer downloaden en analyseren om die vervolgens in te vullen. `cd /tmp`  
`wget http://ftp.nluug.nl/pub/os/Linux/distr/fedora-epel/RPM-GPG-KEY-EPEL-7`  
`gpg --with-fingerprint RPM-GPG-KEY-EPEL-7`

```
pub 4096R/352C64E5 2013-12-16 Fedora EPEL (7) <epel@fedoraproject.org>  
Key fingerprint = 91E9 7D7C 4A5E 96F1 7F3E 888F 6A2F AEA2 352C 64E5
```

druk op **Create Channel**.

Vervolgens de repository aan dit channel koppelen: Ga naar het tabblad **Repositories**, selecteer `epel_7-x86_64-nluug` en druk op **Update Repositories**

log in op de server en doe `spacewalk-repo-sync -c epel_7-x86_64`

stel nog een sync schedule in en klaar.

## Debian Channels en Repositories

Spacewalk kan ook voor Debian en Ubuntu werken.

Wordt aan gewerkt

## En Verder

Nu je je channels met repositories klaar hebt is het tijd om [clients te koppelen](#).

## Bronnen

<http://www.unixmen.com/how-to-manage-spacewalk-channels-and-repositories/>

<https://www.redhat.com/archives/spacewalk-list/2012-January/msg00105.html>

<https://easyitstuff.wordpress.com/2015/08/17/how-to-create-spacewalk-channel/>

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Last update: **2017/03/04 13:28**