



# Managing Software Images

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# 1. Managing Software Images

RBMS manages a list of software images that are currently installed on the switches in the network or eligible for being installed. The image lifecycle encompasses the following states:

- **NEW**, a new image that has been uploaded to RBMS but is not yet eligible for deployment. Typically the integrity of a new image needs to be verified before it becomes eligible for deployment.
- **CANDIDATE**, a candidate image is eligible for deployment. It is a candidate to become the new release image if it passes all tests in the network.
- **RELEASE**, the release image gets installed by default.
- **SUPERSEDED**, a superseded image is a former release image which has been replaced by a newer release.
- **REVOKED**, a revoked image must not be installed on switches in the network.

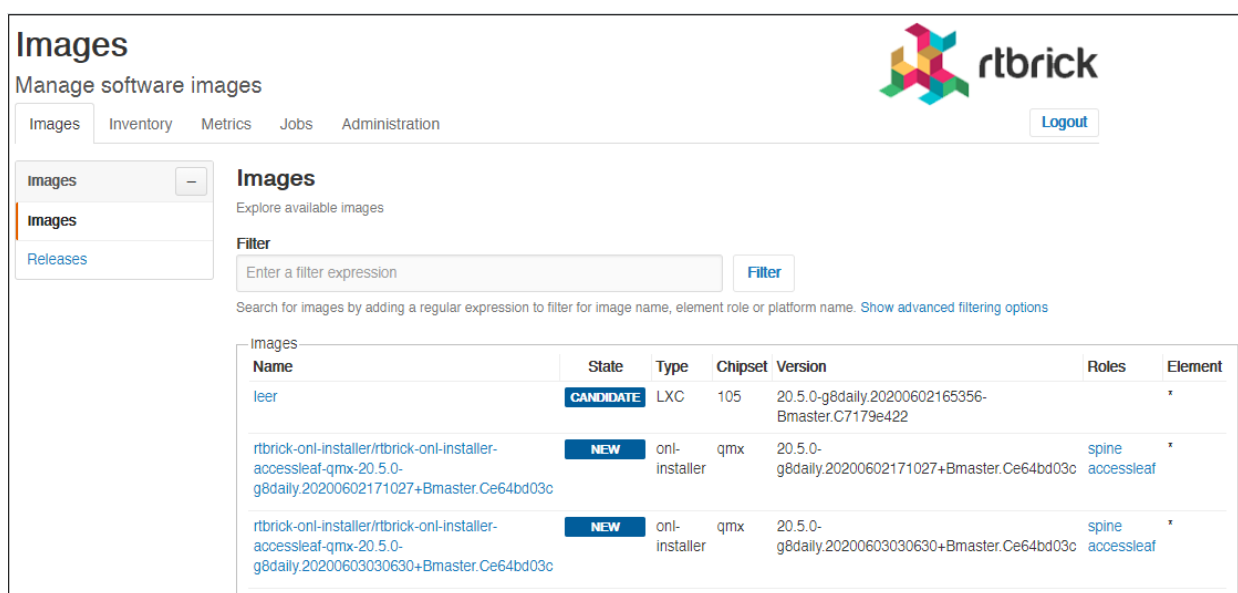
Superseded and revoked images are kept in the resource inventory for the sake of documentation and to track on how many switches superseded or revoked images are installed.

The `rtb-image` tool provides an option to register new image in RBMS. The new image can be installed on a switch via Zero-Touch Provisioning (ZTP).

## 1.1. Viewing all registered images

To view all registered images

- Click the **Images** tab. The **Images** page appears, showing the list of registered images.



The screenshot shows the RBMS interface for managing software images. The page title is "Images" and the subtitle is "Manage software images". The navigation menu includes "Images", "Inventory", "Metrics", "Jobs", and "Administration". The "Images" tab is selected. The page shows a list of registered images with columns for Name, State, Type, Chipset, Version, Roles, and Element. The first image is in "CANDIDATE" state, and the other two are in "NEW" state.

Name	State	Type	Chipset	Version	Roles	Element
leer	CANDIDATE	LXC	105	20.5.0-g8daily.20200602165356-Bmaster.C7179e422		*
rtbrick-onl-installer/rtbrick-onl-installer-accessleaf-qmx-20.5.0-g8daily.20200602171027+Bmaster.Ce64bd03c	NEW	onl-installer	qmx	20.5.0-g8daily.20200602171027+Bmaster.Ce64bd03c	spine accessleaf	*
rtbrick-onl-installer/rtbrick-onl-installer-accessleaf-qmx-20.5.0-g8daily.20200603030630+Bmaster.Ce64bd03c	NEW	onl-installer	qmx	20.5.0-g8daily.20200603030630+Bmaster.Ce64bd03c	spine accessleaf	*

The **Images** page displays the following fields:

Field	Description
Name	Name of the software image
State	Indicates the image state such as New, Candidate, Release, Suspended, Revoked. For more information, see the <a href="#">Image Lifecycle Management</a> section.
Type	Type of the software image such as LXC or ONL
Chipset	Specifies the supported hardware name
Version	Version of the software image
Roles	The image is deployed on the specified element roles.
Element	Name of the registered element

### 1.1.1. Viewing image details

To view the details of an image

1. Click the **Images** tab. The list of registered images appear.
2. In the **Images** group box, click the name of the image that you want to view. The image details page appears.

The screenshot shows the 'Images' management interface. At the top, there's a navigation bar with 'Images', 'Inventory', 'Metrics', 'Jobs', and 'Administration' tabs, and a 'Logout' button. Below the navigation, a sidebar on the left contains 'Image Information' with sub-links for 'Metadata', 'State', 'Applications', 'Packages', and 'Utilization'. The main content area displays the details for a specific image. The breadcrumb path is 'Images > Image rtbrick-onl-installer/rtbrick-onl-installer-accessleaf-qmx-20.5.0-g8daily.20200602171027+Bmaster.Ce64bd03c onl-installer image'. The image name is 'rtbrick-onl-installer/rtbrick-onl-installer-accessleaf-qmx-20.5.0-g8daily.20200602171027+Bmaster.Ce64bd03c'. Under 'General Settings', the following fields are visible: 'Image ID' (2a0131cd-0cd3-4956-92f7-dc5f2157e4aa), 'Image UUID (readonly)', 'Organization' (RtBrick), 'Image Type' (onl-installer), and 'Image Name' (rtbrick-onl-installer/rtbrick-onl-installer-accessleaf-qmx-20.5.0-g8daily.20200602171027+Bmaster.Ce64bd03c).

This page displays the following fields:

Field	Description
Image ID	Image UUID (read-only)
Organization	The organization that issued the image
Image Type	The image type (read-only)
Image Name	The unique image name
Image Version	Image version (read-only)
Category	Optional image category
Description	Optional description of the image
Platform Chipset	The chipset this image is build for (read-only)
Element Roles	This image can be deployed on the selected element roles
Supported Platforms	The list of platforms on which the image can be installed

## 1.1.2. Updating image metadata

To update the metadata of an image

1. Click the **Images** tab. The list of registered images appear.
2. In the **Images** group box, click the name of the image whose metadata you want to update. The image details page appears.
3. On the left navigation pane, click **Metadata**.

### Images

Manage software images



Images   Inventory   Metrics   Jobs   Logs   Administration   [Logout](#)

Images

Image Information

**Metadata**

State

Applications

Packages

Utilization

Images > Image accesleaf\_EC5916-54XK\_onl-installer\_20.6.0-g6daily.20200623033220+Bdevelopment.C8e4ec1e0 onl-installer image

**accessleaf\_EC5916-54XK\_onl-installer\_20.6.0-g6daily.20200623033220+Bdevelopment.C8e4ec1e0**

Review image metadata

General Settings

**Image ID**  
  
 Image UUID (readonly).

**Organization**  
  
 The organization that issued the image

**Image Type**  
  
 The image type (readonly)

4. Update image metadata such as image ID, type, name, and version.
5. Click **Save settings**.

## 1.2. Image Lifecycle Management

The image lifecycle defines five different image states. A new image is an image that has not yet been approved to be eligible for a deployment. The release image is deployed by default. A candidate image is intended to become the new default image, once the candidate has passed all necessary tests. The existing default image is superseded by the new default image. A revoked image must not be used any longer because it contains severe errors.

1. Click the **Images** tab. The list of registered images appear.
2. Click the name of the image that you want to view.
3. Click **State** in the left navigation pane.
4. From the following list of states, select the state that you want to apply.

The screenshot shows the 'Images' management interface in the rtbrick system. The page title is 'Images' and the subtitle is 'Manage software images'. There are navigation tabs for 'Images', 'Inventory', 'Metrics', 'Jobs', 'Logs', and 'Administration'. A 'Logout' button is in the top right. On the left, there is a sidebar with 'Images' (expanded) and 'Image Information' (collapsed). Under 'Image Information', there are links for 'Metadata', 'State' (selected), 'Applications', 'Packages', and 'Utilization'. The main content area shows the image name: 'accessleaf\_EC5916-54XK\_lxd\_20.5.0-g8daily.20200602165356+Bmaster.C7179e422 lxd image'. Below the name is the full image ID: 'Image accessleaf\_EC5916-54XK\_lxd\_20.5.0-g8daily.20200602165356+Bmaster.C7179e422'. The 'Image State' section contains a text description of the lifecycle and a list of five states with radio buttons:
 

- New**: Newly registered image
- Candidate**: Candidate for the next release image
- Release**: The image to be installed by default
- Superseded**: A former release image that has been superseded by a newer image version
- Revoked**: The image must not be used anymore.

 A green 'Save state' button is located at the bottom right of the state selection area.

- **New:** Newly registered image
- **Candidate:** Candidate for the next release image
- **Release:** The image to be installed by default
- **Superseded:** A former release image that has been superseded by a newer image version
- **Revoked:** The image must not be used anymore.

5. Click **Save state**.