



# Migration Toolkit for Virtualization 2.0

## Release notes

Version 2.0



# Migration Toolkit for Virtualization 2.0 Release notes

---

Version 2.0

Red Hat Modernization and Migration Documentation Team  
migration-docs@redhat.com

## Legal Notice

Copyright © 2021 Red Hat, Inc.

The text of and illustrations in this document are licensed by Red Hat under a Creative Commons Attribution–Share Alike 3.0 Unported license ("CC-BY-SA"). An explanation of CC-BY-SA is available at

<http://creativecommons.org/licenses/by-sa/3.0/>

. In accordance with CC-BY-SA, if you distribute this document or an adaptation of it, you must provide the URL for the original version.

Red Hat, as the licensor of this document, waives the right to enforce, and agrees not to assert, Section 4d of CC-BY-SA to the fullest extent permitted by applicable law.

Red Hat, Red Hat Enterprise Linux, the Shadowman logo, the Red Hat logo, JBoss, OpenShift, Fedora, the Infinity logo, and RHCE are trademarks of Red Hat, Inc., registered in the United States and other countries.

Linux<sup>®</sup> is the registered trademark of Linus Torvalds in the United States and other countries.

Java<sup>®</sup> is a registered trademark of Oracle and/or its affiliates.

XFS<sup>®</sup> is a trademark of Silicon Graphics International Corp. or its subsidiaries in the United States and/or other countries.

MySQL<sup>®</sup> is a registered trademark of MySQL AB in the United States, the European Union and other countries.

Node.js<sup>®</sup> is an official trademark of Joyent. Red Hat is not formally related to or endorsed by the official Joyent Node.js open source or commercial project.

The OpenStack<sup>®</sup> Word Mark and OpenStack logo are either registered trademarks/service marks or trademarks/service marks of the OpenStack Foundation, in the United States and other countries and are used with the OpenStack Foundation's permission. We are not affiliated with, endorsed or sponsored by the OpenStack Foundation, or the OpenStack community.

All other trademarks are the property of their respective owners.

## Abstract

This document describes new features, known issues, and resolved issues for the Migration Toolkit for Virtualization 2.0.

---

## Table of Contents

<b>MAKING OPEN SOURCE MORE INCLUSIVE</b> .....	<b>3</b>
<b>CHAPTER 1. MIGRATION TOOLKIT FOR VIRTUALIZATION 2.0</b> .....	<b>4</b>
1.1. NEW FEATURES AND ENHANCEMENTS	4
1.2. KNOWN ISSUES	4



## MAKING OPEN SOURCE MORE INCLUSIVE

Red Hat is committed to replacing problematic language in our code, documentation, and web properties. We are beginning with these four terms: master, slave, blacklist, and whitelist. Because of the enormity of this endeavor, these changes will be implemented gradually over several upcoming releases. For more details, see [our CTO Chris Wright's message](#).

# CHAPTER 1. MIGRATION TOOLKIT FOR VIRTUALIZATION 2.0

You can migrate virtual machines (VMs) from VMware vSphere to OpenShift Virtualization with the Migration Toolkit for Virtualization (MTV).

The release notes describe new features and enhancements, known issues, and technical changes.

## 1.1. NEW FEATURES AND ENHANCEMENTS

This release adds the following features and improvements.

### Warm migration

Warm migration reduces downtime by copying most of the VM data during a precopy stage while the VMs are running. During the cutover stage, the VMs are stopped and the rest of the data is copied.

### Cancel migration

You can cancel an entire migration plan or individual VMs while a migration is in progress. A canceled migration plan can be restarted in order to migrate the remaining VMs.

### Migration network

You can select a migration network for the source and target providers for improved performance. By default, data is copied using the VMware administration network and the OpenShift Container Platform pod network.

### Validation service

The validation service checks source VMs for issues that might affect migration and flags the VMs with concerns in the migration plan.



### IMPORTANT

The validation service is a Technology Preview feature only. Technology Preview features are not supported with Red Hat production service level agreements (SLAs) and might not be functionally complete. Red Hat does not recommend using them in production. These features provide early access to upcoming product features, enabling customers to test functionality and provide feedback during the development process.

For more information about the support scope of Red Hat Technology Preview features, see <https://access.redhat.com/support/offerings/techpreview/>.

## 1.2. KNOWN ISSUES

This section describes known issues and mitigations.

### QEMU guest agent is not installed on migrated VMs

The QEMU guest agent is not installed on migrated VMs. Workaround: Install the QEMU guest agent with a post-migration hook. ([BZ#2018062](#))

### Network map displays a "Destination network not found" error

If the network map remains in a **NotReady** state and the **NetworkMap** CR manifest displays a **Destination network not found** error, the cause is a missing network attachment definition. You must create a [network attachment definition](#) for each additional destination network before you create the



network map. ([BZ#1971259](#))

### Warm migration gets stuck during third precopy

Warm migration uses changed block tracking snapshots to copy data during the precopy stage. The snapshots are created at one-hour intervals by default. When a snapshot is created, its contents are copied to the destination cluster. However, when the third snapshot is created, the first snapshot is deleted and the block tracking is lost. ([BZ#1969894](#))

You can do one of the following to mitigate this issue:

- Start the cutover stage no more than one hour after the precopy stage begins so that only one internal snapshot is created.
- Increase the snapshot interval in the **vm-import-controller-config** config map to **720** minutes:

```
$ oc patch configmap/vm-import-controller-config \
-n openshift-cnv -p '{"data": \
{"warmImport.intervalMinutes": "720"}}'
```