



Financial Transaction Manager

Upgrade FTM 4.0.3-iFix2 to 4.0.3-iFix3 (both application and Db2)

& Rollback iFix3 to iFix2 (both application and Db2)

22 July 2021



Contents

TOC \o "1-3" \hContents	2
<u>1. Overview</u>	3
<u>1.1 Purpose</u>	3
<u>1.2 iFix3 Supported install types</u>	3
<u>1.3 Prerequisites</u>	3
<u>1.4 Version table</u>	3
<u>2. Upgrading from iFix2 to iFix3</u>	4
<u>2.1 Update the Operator catalogs to the latest catalog sha values</u>	4
<u>2.1.1 Upgrade to iFix3 using the IBM Operator Catalog</u>	4
<u>2.1.2 Upgrade to iFix3 using the FTM Product Operator Catalogs</u>	6
<u>2.2 Upgrade each FTM product Operator to "v4.0.3"</u>	7
<u>2.3 Upgrade each FTM product Operand to "4.0.3.0_iFix3" (Artifact)</u>	10
<u>2.4 Set the Product Application to "passive" to scale all pods to zero</u>	11
<u>2.5 Migrate Db2 from iFix2 to iFix3</u>	11
<u>2.6 Upgrade each FTM product Operand to "4.0.3.0_iFix3" (Runtime instance) and set mode to "active" to restart all pods</u>	12
<u>3. Rollback to iFix2</u>	13
<u>3.1 Rollback the application Artifacts Operand to "4.0.3_iFix2"</u>	13
<u>3.2 Scale down the application pods to zero</u>	14
<u>3.3 Rollback Db2 to iFix2</u>	14
<u>3.4 Rollback the Application Operand to "4.0.3_iFix2"</u>	14



1. Overview

1.1 Purpose

This document enumerates the steps to:

- upgrade FTM 4.0.3 from iFix2 to iFix3
- rollback iFix3 to iFix2

1.2 iFix3 Supported install types

The 4.0.3.0 interim fix 3 (iFix3) supports the following types of installations:

- A full (or fresh) installation on a clean system. For more information about how to do a full installation, see IBM Documentation [here](#)
- Upgrade a system that has FTM for Interac e-Transfers 4.0.3.0 interim fix 2 (iFix2) installed to the 4.0.3.0 interim fix 3 (iFix3) level.

1.3 Prerequisites

Prerequisite for airgap clusters:

- Mirror the images to the external environment. For more information, [see](#)

Prerequisite for an upgrade installation:

- The 4.0.3 iFix2 version must be installed and running on the cluster.

1.4 Version table

Use the following table to understand the operator and operand versioning.

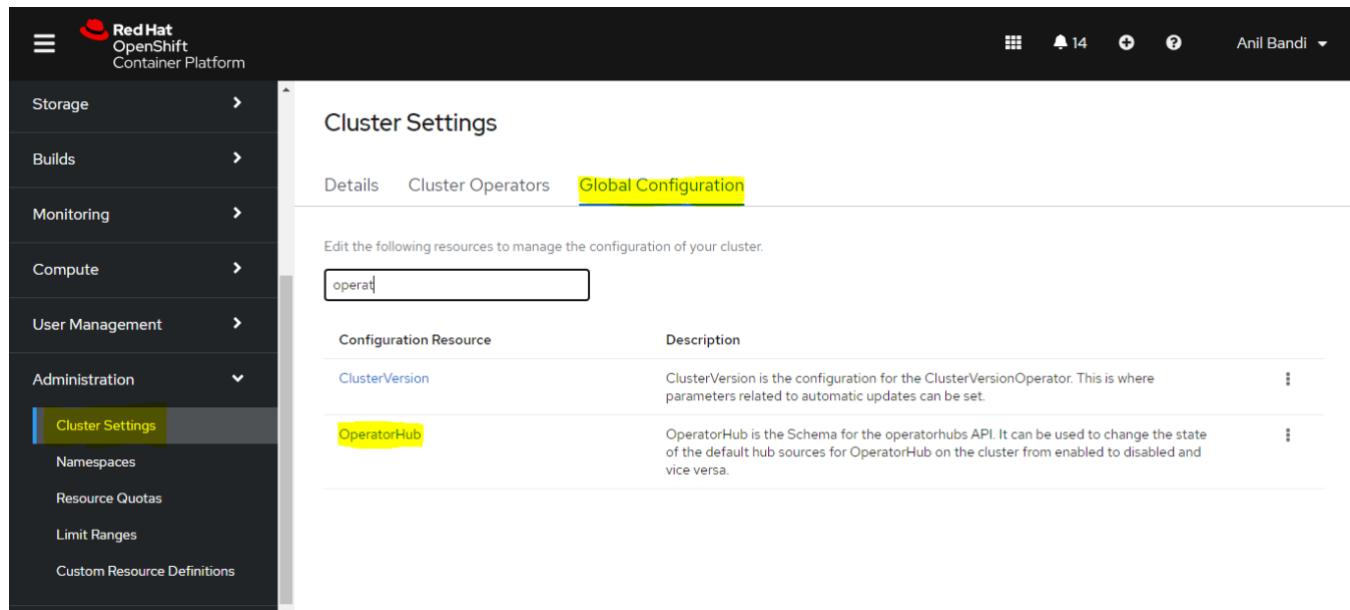
Release	Channel	Operator version	Operand version	Supported operands
403-GA	v4.0	v4.0.0	4.0.3.0	4.0.3.0 only
403-iFix1	v4.0	v4.0.1	4.0.3.0_iFix1	4.0.3.0 and 4.0.3.0_iFix1
403-iFix2	v4.0	v4.0.2	4.0.3.0_iFix2	4.0.3.0 , 4.0.3.0_iFix1 and 4.0.3.0_iFix2
403-iFix3	v4.0	v4.0.3	4.0.3.0_iFix3	4.0.3.0 , 4.0.3.0_iFix1, 4.0.3.0_iFix2 and 4.0.3.0_iFix3

2. Upgrading from iFix2 to iFix3

2.1 Update the Operator catalogs to the latest catalog sha values

2.1.1 Upgrade to iFix3 using the IBM Operator Catalog

1. Log in to the OCP cluster as the cluster administrator.
2. Select [Administration > Cluster Settings > Global Configuration > OperatorHub](#)



The screenshot shows the Red Hat OpenShift Container Platform web interface. The left sidebar has a 'Cluster Settings' section selected. The main content area is titled 'Cluster Settings' and shows the 'Global Configuration' tab is active. A search bar contains the text 'operat'. A table lists configuration resources: 'ClusterVersion' and 'OperatorHub'. The 'OperatorHub' row is highlighted with a yellow background, indicating it is selected for modification.

Configuration Resource	Description
ClusterVersion	ClusterVersion is the configuration for the ClusterVersionOperator. This is where parameters related to automatic updates can be set.
OperatorHub	OperatorHub is the Schema for the operatorhub API. It can be used to change the state of the default hub sources for OperatorHub on the cluster from enabled to disabled and vice versa.

3. Select [Sources](#) > click the overflow menu of the catalog that you want to modify > [Edit CatalogSource](#)



The screenshot shows the Red Hat OpenShift Container Platform interface. The left sidebar is a navigation menu with sections like Home, Operators, Workloads, Networking, Storage, Builds, Monitoring, and Compute. The main content area is titled 'Cluster' and shows a 'Sources' tab selected. A 'Create CatalogSource' button is visible. A search bar shows 'ibm-operator'. A table lists a single CatalogSource:

Name	Status	Publisher	Availability	Endpoint	Registry ...	# of Oper...
ibm-operator-catalog	READY		Cluster wide	docker.io/ibmcom/ibm-operator-catalog@sha256:ecd35efc3dadda35cl7cf14c7d6f21e66b179f0fd24913ea6a8292360c0274d0	-	122

A context menu is open over the 'ibm-operator-catalog' row, with options: Edit labels, Edit annotations, Edit CatalogSource, and Delete CatalogSource.

4. In the **ibm-operator-catalog** YAML replace the iFix2 image sha256 value with the iFix3 image sha256 value as per the following table and click **Save**.

IBM Operator Catalog

Operator Catalog	Interim fix 3: IBM catalog sha256 value and IBM catalog image tag
IBM OPERATOR CATALOG	<p>docker.io/ibmcom/ibm-operator-catalog@sha256:8658993ca5b1abce023c12d066dcd49e722ca7b224c9339d0829014d3a01123c</p> <p>OR using the IBM catalog tag “:latest”</p> <p>docker.io/ibmcom/ibm-operator-catalog:latest</p>



2.1.2 Upgrade to iFix3 using the FTM Product Operator Catalogs

Note: Only upgrade using the Individual Product catalogs if you are NOT using the IBM catalog as described in 2.1.1.

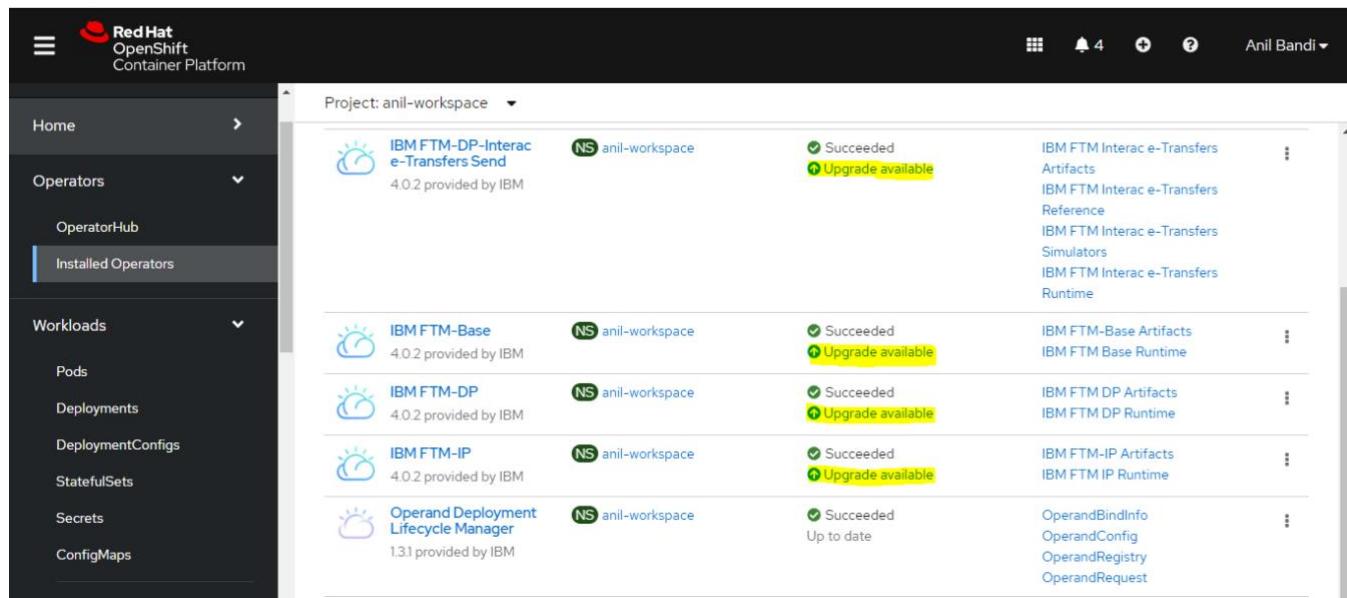
Individual Product Catalogs

Product	Interim fix 3: Product Operator catalog sha256 values.
FTM Base	docker.io/ibmcom/ibm-ftm-base-catalog@sha256:781db90621ee31aead3c87443425997de16873393660d073d1b88d4a71ed9c71
FTM IP	docker.io/ibmcom/ibm-ftm-ip-catalog@sha256:906e07eb548613b47ce6edc938045d922f46f8a10f2f71c33fdff659f956b356
FTM DP	docker.io/ibmcom/ibm-ftm-dp-catalog@sha256:f2cc6702436424da4212a008b07ae29e0deebd0427c2b42373d0ba1bcac2a3c43
FTM Interac	docker.io/ibmcom/ibm-ftm-dp-interac-e-transfers-send-catalog@sha256:8118f544124d20e0810db67e422f29dbe2b5110951125b6cf581313f916b7ad7

2.2 Upgrade each FTM product Operator to “v4.0.3”

Note: If the approval strategy is set to automatic, the operator is automatically upgraded to v4.0.3, however, if the approval strategy is set to manual, follow these steps:

1. Click [Installed Operators](#) and wait until you see the Upgrade available option under the status section of the operators, as shown in the following screen capture. This message might take up to 10 minutes to appear.



Operator	Namespace	Status	Actions
IBM FTM-DP-Interac e-Transfers Send	anil-workspace	Succeeded Upgrade available	IBM FTM Interac e-Transfers Artifacts IBM FTM Interac e-Transfers Reference IBM FTM Interac e-Transfers Simulators IBM FTM Interac e-Transfers Runtime
IBM FTM-Base	anil-workspace	Succeeded Upgrade available	IBM FTM-Base Artifacts IBM FTM Base Runtime
IBM FTM-DP	anil-workspace	Succeeded Upgrade available	IBM FTM DP Artifacts IBM FTM DP Runtime
IBM FTM-IP	anil-workspace	Succeeded Upgrade available	IBM FTM-IP Artifacts IBM FTM IP Runtime
Operand Deployment Lifecycle Manager	anil-workspace	Up to date	OperandBindInfo OperandConfig OperandRegistry OperandRequest

Note: The previous screen capture applies to OCP v4.6. For OCP v4.5, the status is shown as “updating”.



2. Click the Upgrade available For example, IBM FTM-DP-Interac e-Transfers-Send Operator.

Operator	Namespace	Status	Actions
IBM FTM-DP-Interac e-Transfers Send	anil-workspace	Succeeded Upgrade available	IBM FTM Interac e-Transfers Artifacts IBM FTM Interac e-Transfers Reference IBM FTM Interac e-Transfers Simulators IBM FTM Interac e-Transfers Runtime
IBM FTM-Base	anil-workspace	Succeeded Upgrade available	IBM FTM-Base Artifacts IBM FTM Base Runtime
IBM FTM-DP	anil-workspace	Succeeded Upgrade available	IBM FTM DP Artifacts IBM FTM DP Runtime
IBM FTM-IP	anil-workspace	Succeeded Upgrade available	IBM FTM-IP Artifacts IBM FTM IP Runtime
Operand Deployment Lifecycle Manager	anil-workspace	Up to date	OperandBindInfo OperandConfig OperandRegistry OperandRequest

3. Click Preview Install Plan.

Review Manual Install Plan

Inspect the requirements for the components specified in this install plan before approving.

[Preview Install Plan](#)

4. Click Approve.

Review Manual Install Plan

Once approved, the following resources will be created in order to satisfy the requirements for the components specified in the plan. Click the resource name to view the resource in detail.

[Approve](#)

[Deny](#)



5. Go to [Installed Operators > Operator Name > Subscription](#). After a successful installation, the following information is displayed.

The screenshot shows the Red Hat OpenShift Container Platform interface. The left sidebar is dark-themed and includes sections for Home, Operators (selected), OperatorHub, and Installed Operators. The main content area is titled 'Project: anil-workspace' and shows the 'IBM FTM-DP-Interac e-Transfers Send' operator. The 'Subscription' tab is selected. The 'Subscription details' section displays the following information:

Channel	Approval	Upgrade status
v4.0	Manual	1 installed Up to date

Other details shown include:

- Name:** ibm-ftm-interac-e-transfers-operator
- Namespace:** anil-workspace
- Labels:** (empty)
- Installed version:** CSV ftminterac-e-transfers-operatorv4.0.3
- Starting version:** ftminterac-e-transfers-operatorv4.0.2
- CatalogSource:** CS ibm-ftm-dp-interac-e-transfers-send-catalog (Healthy)

The operator version is now updated to v4.0.3 (refer to the Version Table above)



2.3 Upgrade each FTM product Operand to “4.0.3.0_iFix3” (Artifact)

Use the following steps to upgrade the operand to “4.0.3.0_iFix3”

1. Log in to the OCP
2. Switch to your project: “oc project <project-name>”
3. Get the product artifact instance; edit the instance by updating the “version” to “**4.0.3.0_iFix3**”, then Save.

Product name	Command	Update version and save.
FTM Base	oc get ftmbaseartifacts oc edit ftmbaseartifacts <instance-name>	spec: license: accept: true version: 4.0.3.0_iFix3
FTM for Immediate Payments	oc get ftmipartifacts oc edit ftmipartifacts <instance-name>	spec: license: accept: true version: 4.0.3.0_iFix3
FTM for Digital Payments	oc get ftmdpartifacts oc edit ftmdpartifacts <instance-name>	spec: license: accept: true version: 4.0.3.0_iFix3
FTM for Interac e-Transfers	oc get ftminteracetransferartifacts oc edit ftminteracetransferartifacts <instance-name>	spec: license: accept: true version: 4.0.3.0_iFix3



2.4 Set the Product Application to “passive” to scale all pods to zero

For each product offering (Base, IP, DP and Interac), change the **DR mode** to “**passive**”, then wait until all pods (that is the J2EE, J2SE, IBM MQ, and App Connect Enterprise pods) scale down to zero - you may need to wait up to 10 minutes for all pods to scale to zero.

Note: The artifacts and simulator pods keep running because they are not part of the disaster recovery (DR) activity.

Product name	Command	Update dr.mode to “passive” and save.
FTM Base	oc get ftmbase oc edit ftmbase <instance-name>	spec: license: accept: true dr: mode: passive
FTM for Immediate Payments	oc get ftmip oc edit ftmip <instance-name>	spec: license: accept: true dr: mode: passive
FTM for Digital Payments	oc get ftmdp oc edit ftmdp <instance-name>	spec: license: accept: true dr: mode: passive
FTM for Interac e-Transfers	oc get ftminteracetransfers oc edit ftminteracetransfers <instance-name> oc get ftminteracetraferreferences oc edit ftminteracetraferreferences <instance-name>	spec: license: accept: true dr: mode: passive

2.5 Migrate Db2 from iFix2 to iFix3

To migrate the Db2 FTM database from iFix2 to iFix3 follow the instructions in the [Db2_Migration_From_iFix2_to_iFix3.pdf](#) file which is stored in the Interac Entitled documents. See the [FTM 4.0.3 Release Information](#) for instructions on how to download the Interac Entitled documents.



2.6 Upgrade each FTM product Operand to “4.0.3.0_iFix3” (Runtime instance) and set mode to “active” to restart all pods

For each product offering edit its running instance as follows:

1. Change dr.mode = “active”
2. Edit “version” to “4.0.3.0_iFix3”
3. save the changes.

Note: It is recommended that you only enable the **init** containers **after the upgrade**. For more information about enabling the init containers see the IBM Documentation [here](#). If you have already enable the init containers you can ignore this comment.

Product name	Command	Update dr.mode to “active”; add version: 4.0.3.0_iFix3 and save.
FTM Base	oc get ftmbase oc edit ftmbase <instance-name>	spec: license: accept: true dr: mode: active version: 4.0.3.0_iFix3
FTM for Immediate Payments	oc get ftmip oc edit ftmip <instance-name>	spec: license: accept: true dr: mode: active version: 4.0.3.0_iFix3
FTM for Digital Payments	oc get ftmdp oc edit ftmdp <instance-name>	spec: license: accept: true dr: mode: active version: 4.0.3.0_iFix3
FTM for Interac e-Transfers	oc get ftminteracetransfers oc get ftminteracetransfersimulators oc get ftminteracetransferreferences if the instance was created by the runtime Note: Update the simulators instance first. oc edit ftminteracetransfersimulators <instance-name> oc edit ftminteracetransfers <instance-name> if the instance was created by the reference oc edit ftminteracetransferreferences <instance-name>	For Runtime Instance: spec: license: accept: true dr: mode: active version: 4.0.3.0_iFix3 For Simulator Instance: spec: license: accept: true version: 4.0.3.0_iFix3

Wait until the 4.0.3.0_iFix3 operand pods are created. After a successful upgrade, all the pods should be in a “Running” state.



3. Rollback to iFix2

3.1 Rollback the application Artifacts Operand to “4.0.3_iFix2”

For each product artifact instance follow the instructions in the next table:

Product name	Command	Instructions: Update version and save.
FTM Base	oc get ftmbaseartifacts oc edit ftmbaseartifacts <instance-name>	spec: license: accept: true version: 4.0.3.0_iFix2
FTM for Immediate Payments	oc get ftmipartifacts oc edit ftmipartifacts <instance-name>	spec: license: accept: true version: 4.0.3.0_iFix2
FTM for Digital Payments	oc get ftmdpartifacts oc edit ftmdpartifacts <instance-name>	spec: license: accept: true version: 4.0.3.0_iFix2
FTM for Interac e-Transfers	oc get ftminteracetransferartifacts oc edit ftminteracetransferartifacts <instance-name>	spec: license: accept: true version: 4.0.3.0_iFix2

This will automatically revert the Artifact pods to **4.0.3.0_iFix2** without the need to scale down these pods.



3.2 Scale down the application pods to zero

For each product instance follow the instructions in the next table:

Product name	Command	Instructions: Update dr.mode: passive and save.
FTM Base	oc get ftmbase oc edit ftmbase <instance-name>	spec: license: accept: true dr: mode: passive
FTM for Immediate Payments	oc get ftmip oc edit ftmip <instance-name>	spec: license: accept: true dr: mode: passive
FTM for Digital Payments	oc get ftmdp oc edit ftmdp <instance-name>	spec: license: accept: true dr: mode: passive
FTM for Interac e-Transfers	oc get ftminteracetransfers oc edit ftminteracetransfers <instance-name> oc get ftminteracetranferreferences oc edit ftminteracetranferreferences <instance-name>	spec: license: accept: true dr: mode: passive

Note: After changing the DR mode to “passive” wait until all the pods (that is, J2EE, J2SE, IBM MQ, and App Connect Enterprise) scale down to zero. You might need to wait approximately 10 minutes. The artifacts and simulator pods keep running because they are not a part of the disaster recovery (DR) activity.

3.3 Rollback Db2 to iFix2

To rollback the FTM Db2 database from iFix3 to iFix2 follow the instructions in the **Db2_Migration_From_iFix2_to_iFix3.pdf** file which is stored in the Interac Entitled documents. See the [FTM 4.0.3 Release Information](#) for instructions on how to download the Interac Entitled documents.

3.4 Rollback the Application Operand to “4.0.3_iFix2”

For each product instance follow the instructions in the next table:



Note: It is recommended to only enable the **init** containers after the rollback. If you have already enabled the **init** containers you can ignore this note. See the IBM Documentation for information on the **init** containers [here](#).

Product name	Command	Instructions
		Update dr.mode to “active”; Update version to 4.0.3.0_iFix2 and save.
FTM Base	oc get ftmbase oc edit ftmbase <instance-name>	spec: license: accept: true dr: mode: active version: 4.0.3.0_iFix2
FTM for Immediate Payments	oc get ftmip oc edit ftmip <instance-name>	spec: license: accept: true dr: mode: active version: 4.0.3.0_iFix2
FTM for Digital Payments	oc get ftmdp oc edit ftmdp <instance-name>	spec: license: accept: true dr: mode: active version: 4.0.3.0_iFix2
FTM for Interac e-Transfers	oc get ftminteracetrafers oc get ftminteracetrafersimulators oc get ftminteracetrafferrferences if the instance was created by the runtime Note: Update the simulators instance first. oc edit ftminteracetrafersimulators <instance-name> oc edit ftminteracetrafers <instance-name> if the instance was created by the reference oc edit ftminteracetrafferrferences <instance-name>	For Runtime Instance: spec: license: accept: true dr: mode: active version: 4.0.3.0_iFix2 For Simulator Instance: spec: license: accept: true version: 4.0.3.0_iFix2

Wait until the 4.0.3.0_iFix2 operand pods are created. After a successful upgrade, all the pods should be in a “Running” state.