



Ryft X Installation Procedures

Getting Started Guide

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Using This Guide

This guide is for the System Administrator responsible for installing the Ryft X software on a commodity server in your data center or the Cloud. Getting started with Ryft X is easy. Download the licensed Ryft X software to any machine in your data center or in the Cloud that meets the minimum requirements specified, run short, simple setup procedures and then start achieving actionable results.

This guide will walk you through the steps to start achieving faster, smarter insights with Ryft.

Ryft Technical Support

You may access our first-tier support directly from our public website by using the Chat Widget and starting a chat with our support agents. All chat conversations are tracked and become help desk tickets in our support system. In addition, you can access our support system through the Ryft Support site: <https://support.ryft.com>. Log in with your credentials to see your past tickets, create new tickets, and to access limited-access content.

For technical support, contact us:

Email: support@ryft.com

Web: <https://support.ryft.com>

Phone: 1-855-793-8663

About Ryft Systems Inc.

Ryft makes data analytics fast and simple with the world's top cloud and physical heterogeneous compute accelerators. With more than a decade of experience, Ryft helps deliver instant insights into any data by eliminating the latency associated with data indexing and transformation/curating. Today, industry leaders rely on Ryft to quickly and simply unlock the value hidden in their data for real-time actionable insight.



1: Ryft X Hardware Requirements

	Minimum	Recommended
CPU	1 Socket 10 Core Intel Skylake or later	2 Socket 10 Core Intel Haswell
RAM	128GB	256GB or more
Direct Attached Storage	Fast (7.2RPM) in a striped RAID configuration	4 NVMe drives striped by standard Linux mdadm
Networking	10GE	10GE or better
Operating System	Ubuntu 16.04 LTS	Ubuntu 16.04 LTS

**Installer Disk space requirement: Minimum 40GB free space on root volume (/home/ryftuser)



2: Download Ryft X

The installers are available for download from Amazon S3 at the URLs listed below. You can download using the AWS console.

- https://s3.amazonaws.com/ryft-product-installers/products_ryftx_r736_installer.tgz
- https://s3.amazonaws.com/ryft-product-installers/products_ryft_server_1.1.0_installer.tgz
- https://s3.amazonaws.com/ryft-product-installers/products_odbc_2.4.32.2_installer.tgz

Alternatively you can download from a Unix command prompt by typing: **wget <URL>**



3: Ryft X Installation Procedures

Prerequisite: ability to ssh into server

1. Login as a user (NOT ryftuser) with sudo privileges
2. Repeat login on a second terminal, and "sudo bash" to have a root user terminal.
3. This second window of root user is for safety in case there is a login problem during setup of ryftuser account.
4. Put products_ryftx_r736_installer.tgz on server
5. tar xvfz products_ryftx_r736_installer.tgz setup_ryftuser.sh

Setup Ryftuser User ID

1. run: setup_ryftuser.sh

Expected final message: "ryftuser userid is successfully setup"

2. Logout
3. Login as ryftuser (if prompted, password is ryftpass)
4. Enter: sudo ls -la /root (this should display a list of files, and you should not have been prompted for password)

Example:

```
ryftuser@ip-172-31-58-241:~$ sudo ls -la /root
total 20
drwx-----  3 root root 4096 Apr 17 14:54 .
drwxr-xr-x  23 root root 4096 Apr 17 14:54 ..
-rw-r--r--   1 root root 3106 Oct 22  2015 .bashrc
-rw-r--r--   1 root root  148 Aug 17  2015 .profile
drwx-----  2 root root 4096 Apr 17 14:54 .ssh
```

5. From this point onwards, proceed as ryftuser. You can close the root user window if you had a second window.
6. tar xvfz products_ryftx_r736_installer.tgz

Setup /ryftone Filesystem

1. The setup_ryftone_filesys.sh script performs RAID0 disk striping on NVME drives by default.
1. To stripe any type of disk drive, edit setup_ryftone_filesys.sh and set NVME_ONLY=0.
2. sudo ./setup_ryftone_filesys.sh

This message will be displayed if NVME_ONLY=1 and no NVME drives are available:

```
*****ATTENTION*****
```

```
No available NVME disks found.
```

```
/ryftone filesystem not created.
```

DO NOT PROCEED WITH RYFT software installation and contact your Solutions Architect or [Ryft Support](#).

3. If no NVME drives are available, capture the output these commands for further investigation.
STOP HERE

```
lsblk
lsblk -s -d -n -p
lsblk -s -d -n -p | grep disk
sudo lshw -class disk
```

4. run: test_ryftone_filesys.sh

Expected final message: "/ryftone filesystem is good."

5. If the /ryftone filesystem is setup correctly, and the filesystem is composed of NVME drives, set

```
setup_ryftone_filesys.sh to run at startup
sudo cp setup_ryftone_filesys.sh /etc/init.d/ryftone-init
sudo update-rc.d ryftone-init defaults
sudo service --status-all|grep ryftone-init (expect "[ + ] ryftone-
init")
```

6. Shut down then power up the machine
7. run: test_ryftone_filesys.sh

Expected final message: "/ryftone filesystem is good."

Install Ryft X

1. run: install_ryftx.sh

During installation, respond yes(Enter) whenever prompted to install packages.

After ryftx is installed, the smokex test is expected to fail because ryftx is NOT licensed.

2. run: `ryft_gen_machine_id > ~/machine_id.txt`
3. email [Kevin Madden \(cc Tony Albano\)](#) machine_id.txt

Include in the email content:

- license expiration date
- information about the machine, such as customer name & brief description of machine's purpose (e.g. Bank of New York evaluation)

wait for email reply from Kevin or Tony with attachment ryftx_license

4. copy ryftx_license to server's /tmp directory

```
sudo mv /tmp/ryftx_license /usr/share/ryft
sudo chmod 644 /usr/share/ryft/ryftx_license
sudo rm -f /tmp/ryftx-smoke-out
```

5. run: `smokex` (expect PASS)

Post-Licensed Ryft X Test

1. Run: `test_ryftx.sh`

Expected final message: "All ryftx tests passed"

NOTE: The test requires data files including wikipedia-20150518.bin in /ryftone/regression The test data files are sourced from the current directory or secondarily from AWS S3. Getting the wikipedia file from AWS S3 takes several minutes.

Example: An AWS instance gets Wikipedia in approximately 8 minutes.

Install and Test Ryft-Server

1. copy products_ryft_server_1.1.0_installer.tgz onto server /home/ryftuser directory
2. `tar xvzf products_ryft_server_1.1.0_installer.tgz`

Pre-Install Ryft-Server

1. run: `preinstall_ryft_server.sh`

Expected final message: "preinstall ryft-server passed"

Test Ryft-Server

1. run: `test_ryft_server.sh`

Expected final message: "All ryft-server tests passed"



4: Connect to ODBC Server/Client

1. copy products_odbc_2.4.32.2_installer.tgz onto server /home/ryftuser directory
2. tar xvzf products_odbc_2.4.32.2_installer.tgz

Install ODBC Server/Client

1. run: `install_odbc.sh`

Expected final message: "ODBC installation completed"

Test ODBC Server/Client

1. run: `test_odbc.sh`

Expected final message: "All odbc tests passed"

NOTE: The test requires SampleDatabases package extracted into /ryftone. The 10 MB SampleDatabases package is sourced from the current directory or secondarily from AWS S3.



5: Frequently Asked Questions

This section covers frequently asked questions regarding installing and running Ryft X in your environment. If you have any additional questions, please contact your Ryft Solutions Architect or [Ryft Support](#).

How do I use Ryft's ODBC/JDBC connector?

Ryft makes supercharging your ODBC/JDBC-based data visualization and business intelligence tools simple and seamless. Whether in the cloud or using Ryft X on premise, the [Ryft ODBC/JDBC connector guides](#) provide step-by-step instructions for connecting and using Ryft and these tools seamlessly.

How do I connect with/download Elasticsearch and what version do you support?

We support version 2.4 of Elasticsearch. If you require Elasticsearch 2.4, please contact your Ryft Solutions Architect or [Ryft Support](#).

How do I use the Ryft REST JSON API?

Our [Ryft REST Command User and Admin Guide](#) provides step-by-step instructions for how to use the REST JSON API.

Where can I find Ryft's Open API for information on using Ryft's library of primitives?

All of Ryft's APIs can be found at www.ryft.com/products/api.