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Install the Java agent

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Our Java agent auto-instruments your code so you can start monitoring applications. You can use our launcher, or follow the instructions in this document to complete a basic Java agent installation.

Add Java data ⌗

> 💡 To use Java or any other agent, as well as the rest of our observability platform ⌗, join the New Relic family! Sign up ⌗ to create your free account in only a few seconds. Then ingest up to 100GB of data for free each month. Forever.

1. Before you install

Check the following:

- Make sure you have signed up for a New Relic account.
- Review the compatibility and requirements.
- Check if your environment requires additional or alternative install steps.

2. Get the agent

Download `newrelic-java.zip` using `curl`, `Invoke-WebRequest` (PowerShell), or the New Relic UI:

Hide All ☰

Show all in this section OR type F to show all, ⌃H to hide all

Download using `curl`

Complete the following:

1. Start a command-line session.

2. Change to a temporary directory where you can download the zip file.

3. Execute this `curl` command:

```
curl -O https://download.newrelic.com/newrelic/java-agent/newrelic-
agent/current/newrelic-java.zip
```

4. Unzip `newrelic-java.zip`

Download using `Invoke-WebRequest` (PowerShell)   ⌃

Complete the following:

1. Start a PowerShell session.

2. Change to a temporary directory where you can download the zip file.

3. Execute this PowerShell command:

```
Invoke-WebRequest -Uri https://download.newrelic.com/newrelic/java-
agent/newrelic-agent/current/newrelic-java.zip -OutFile newrelic-java.zip
```

4. Unzip `newrelic-java.zip`:

```
Expand-Archive -Path newrelic-java.zip -DestinationPath DESTINATION_PATH
```

Download from the New Relic UI   ⌃

Complete the following:

1. Sign in to New Relic. ⧉

2. From the account dropdown in the New Relic UI, select **Account settings**.

3. In the right sidebar under **Most recent**, select the Java agent, and save the `newrelic-java.zip` to a temporary directory.

4. Unzip `newrelic-java.zip`.

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3. Configure the agent

Here's how to do a basic setup with agent configuration settings in `newrelic.yml`.

> 💡 For an advanced installation, you can pass settings with environment variables, Java system properties, or server-side configuration. To understand the precedence of these configuration settings, see Java agent configuration: Config file.

The Java agent requires the `license_key` and `app_name` settings at startup. All the other settings are optional, and you can review them in Java agent configuration: Config file.

Go to the unzipped installation file, and inside the `newrelic` subdirectory, edit `newrelic.yml`:

1. Find the line with `license_key`.

2. Replace *'<%= license_key %>'* with your [license](#). For example:

   ```
   license_key: 456n20n1367ov2s174v51nvn789d21s67v26NRAL
   ```

3. Find the line with `app_name`.

4. Replace *My Application* with a name that helps you identify the application. For example:

   ```
   app_name: Tax Calculator
   ```

   > 💡 If you need tips about how to name your application, see Name your application.

5. Add optional settings that you want, such as [agent logging](#) and [distributed tracing](#) (or add them later).

6. Save and close `newrelic.yml`.

4. Install the agent

The Java agent installation involves copying all the unzipped New Relic files into the directory structure of your application server/container. For example, you can create a `/opt/newrelic` directory, but if you want to put the files elsewhere, make sure of the following:

- The .jar files in the directory cannot be on the classpath.
- The .jar files cannot be in directories specified in `java.endorsed.dirs`.

To install the Java agent:

1. In your application server/container directory structure, create a directory for New Relic files (for example, `/opt/newrelic`).

2. Copy all the New Relic files from your unzipped `newrelic` directory into your new directory.

3. Make sure that your application server/container includes this option when it starts Java (for tips on how to do this with your tool or framework, see [JVM arguments](#)):

   ```
   -javaagent:/full/path/to/newrelic.jar
   ```

4. Start or restart your application server/container.

Generate some traffic for your app, and then wait a few minutes for data to appear in the [APM Summary page](#). If nothing appears, follow the [troubleshooting procedures](#).

5. Post-installation tasks

If you are using `newrelic.yml` to make configuration settings, consider the following:

- We recommend you change the default `newrelic.yml` file permissions to read/write only for the owner of the application server process.
- As you would with other important files, be sure `newrelic.yml` is part of your backup routine.
- We recommend using New Relic Diagnostics to validate your settings, either before or after you deploy.

What's next?

Here are some additional topics to consider:

- For Docker questions, see Install New Relic Java agent for Docker.
- View your app in New Relic and get comfortable with the user interface.
- Read the documentation about APM. For example, read about the Summary page, the **JVM metrics** page, the **Transactions** page, and other performance monitoring features.
- Query your data using NRQL (New Relic Query Language).
- Learn about setting up custom instrumentation and async instrumentation for application activity not monitored by default.

For more help

If you need more help, check out these support and learning resources:

- Browse the Explorers Hub ⧉ to get help from the community and join in discussions.
- Find answers on our sites and learn how to use our support portal.
- Run New Relic Diagnostics, our troubleshooting tool for Linux, Windows, and macOS.
- Review New Relic's data security and licenses documentation.