## Automatically setting an EC2 instance using bootstrap script

When we create a virtual server, we need to install software so it does something. Commonly, a VM can be used to run a web server like Apache httpd. To install software/packages when setting up an EC2 Linux instance, we tell AWS to run a bootstrap script as "User data". You can do this **during the EC2 setup**, under AWS EC2. We recommend you use the provided script (provided in a separate text file):



This script does the following (for more details, visit <a href="https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/ec2-lamp-amazon-linux-2.html">https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/ec2-lamp-amazon-linux-2.html</a>):

- 1. Updates the Linux operating system with the dnf command
- 2. Installs the Apache Web server httpd along with PHP and MySQL and other necessary packages
- 3. Changes the max php file upload size to 10M
- 4. Starts the Web server and checks its configuration
- 5. Adds ec2-user to apache group
- 6. Changes file and directory permissions so files can be uploaded to the www directory
- 7. Copies a sample php web page to the www directory for testing.

**NOTE**: Pay attention to the syntax when you copy & paste the script to the input field in AWS Management Console. Syntax errors often occur with cross-platform copy & paste. To mitigate this issue, we have provided a bare text file (*Install\_PHP\_AWS.rtf* file) that contains the script.

**NOTE**: On Swinburne Mercury, the directory for html files was called *www/htdocs*. In this set up, it is *www/html*.

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