Contents

Introduction ................................................................................................................................. 2
Adding Data Sets to the Table .................................................................................................. 2
Removing Data Sets from the Table ...................................................................................... 4
Scrolling/Zooming within the Chart ...................................................................................... 4
  Setting the Viewing Period (Window Size) ........................................................................... 4
  In Chart Zooming ................................................................................................................. 5
Downloading Data as CSV File ............................................................................................... 6
Troubleshooting ...................................................................................................................... 6
**Introduction**

This site allows you to view prices of Amazon EC2 Spot Instances during various times in the past. It can be used for research purposes or viewing trends of pricing over time. The system consists of a server which connects to Amazon through the AWS API which is used to retrieve the data. The data is stored on a database which utilises mySQL, and the web page is hosted through Apache Tomcat. The server will query the Amazon AWS server on a daily basis to update the local database with new data. The charting software currently being utilised is by amCharts using the Stock chart option through JavaScript.

**Adding Data Sets to the Table**

Before data can be displayed, the required selections will need to be added to the data set table, this is for the filter. The selections are dynamically created from the database located on the server. By default the drop down selections will be set to the first selection, e.g. Region will default to ‘us-east-1’. The Time Interval selection will be set to the beginning and end of the current year by default.

This is the Filter Option selection:

![Filter Options](image)

1. **Region:** Click the down arrow in the Region drop down selection, and select the Region you would like to view. E.g. us-west-2.

![Availability Zone](image)

2. **Availability Zone:** Click the down arrow in the Availability Zone drop down selection, and select the Availability Zone you would like to view. E.g. us-west-2b. Please keep in mind that the options available in the Availability Zone will depend on what is available for the selected region.
3. **Instance Type:** Click the down arrow in the Instance Type selection, and select the Instance Type you would like to view. E.g. m1.small. Please keep in mind that the options available in the Instance Type depend on the Region and the Availability zone, not all Instance types are available in all Regions.

4. **Product:** Click the down arrow in the Product selection, and select the Operating System that you would like to view. E.g. Windows. Please keep in mind that the options available in the Product selection will depend on the particular Region, Availability Zone, and Instance Type.

5. Press ‘Select’ to add the selections to the filter table. The selections will be added to a table which will appear under the ‘Filter Options’. After each data set is added a chart will appear for each data set. You can add up to four (4) data sets to the table.

6. The Time Interval selection specifies the scope of the data that is retrieved from the database, this will affect the data store which is used by both the chart and the available data to be downloaded as a CSV.
Removing Data Sets from the Table

Data sets can easily be removed from the table, if there are 4 data sets in the table, and the third data set was removed, the data sets will shift upwards. Please note that the chart colours will also change to what they were previously if the data set that was removed is in between two wanted charts.

1. Find the data set you wish to remove.
2. Click the ‘Remove’ button located next to the data set.
3. The whole table can be cleared by clicking on ‘Remove All’.

Scrolling/Zooming within the Chart

The chart does have several options for zooming; this will be used in conjunction with the Time Interval selection in the filter options above the chart. It is recommended to select the range of data that is required without selecting unnecessary data, as it will make the charting experience cleaner and faster.

When the graph is displayed it will default to a ‘window size’ of 1 month, the data displayed on the chart will be over a one month period. The user can also specify the date and time period in which they would like to view the data. There are pre-set ‘window’ options ranging from 1 hour to ‘MAX’ which is all the available data.

Setting the Viewing Period (Window Size)

To set the window size there are pre-set buttons on the bottom of the chart (shown above). These buttons will change the size of the slider above the buttons. The space between the two bars is the current size of the window; this will change depending on what zoom level is selected. If the button selected is larger than the current available data the two bars will be at the two extremes of the slider (As shown below).

Manual adjustment of the window size is also possible by clicking and dragging either the start or end bar further outwards.
For more precise control of the window size it is possible to type in the start/end date and time into the text boxes at the bottom left of the chart. After the required date/time is entered press the Return/Enter key. Please note: in order for this function to work the required date/time must be within the current window.

**In Chart Zooming**

1. Select the start position of where you would like to zoom, and drag the cursor to the end point.

This will then enlarge the selected data selection as shown below:
**Downloading Data as CSV File**

Data can be downloaded as a CSV (comma separated value) file, the format of the data within the CSV file is as follows: YYYY-MM-DD HH:MM:SS, price e.g. 2012-09-11 21:33:27.0,0.01.

1. In order to download data as a CSV file, the filter options would have to have been selected and added to the table. Please refer to: Adding Data Sets to the Table for more information.
2. After the required data set has been added to the table through the Filter Options, a table will appear underneath the Filter Options as shown below:

![Current Data Sets:](image)

3. Click ‘Download CSV’ to save the data as a file. Please note that this may take several seconds depending on the amount of data being downloaded. After this period a download prompt will appear asking the user to save the file.

**Troubleshooting**

If you are having difficulties in connecting to the page:

1. Ensure that your internet connection is currently working. You can do this by visiting other websites to ensure that your issue is isolated.

2. If your internet connection is working and you still cannot reach the page, then it is likely a server issue. In this case you may wait for the issue to be resolved, or contact the site administrators.

If you are having difficulty with page features:

1. Ensure that you have JavaScript enabled. The core features of the page will be unavailable otherwise, as they are all implemented using the JavaScript language. To enable JavaScript, navigate to your browser’s options to find the appropriate section (commonly a checkbox). For more information on completing this tasks in different browsers, view your browsers online documentation.

2. Make sure you are using one of the supported browsers. Core features are available on all major browsers; however features such as the graph download are currently only available to Google Chrome and Mozilla Firefox.

3. If the above steps do not resolve your issue, contact a page administrator or wait for the issue to be resolved, as it is likely related to the servers.