

Cloud Computing in R Programming & R Studio

What is Cloud Computing?

Cloud computing is a model of computing in which resources are provided as a service over the Internet. It is a model of computing in which resources are provided as a service over the Internet.

Cloud Computing comes at 3 categories:

- Infrastructure as a Service (IaaS)
- Platform as a Service (PaaS)
- Software as a Service (SaaS)

What is future of Cloud Computing?

The global forecasted growth in the cloud computing market is expected to reach \$106 billion by 2016, up from \$67 billion in 2013. The growth is driven by the increasing adoption of cloud computing by businesses and the government.

Source: Frost & Sullivan, 2013-2016

Global Cloud Computing Market \$106 BILLION by 2016

Cloud Computing Market \$67 BILLION in 2013

Cloud Computing Market \$106 BILLION in 2016

Cloud Computing Market \$106 BILLION in 2016

What are the benefits of using 'Cloud' ?

- Cost Savings
- Accessibility
- Scalability
- Easy monitoring

What are the different services available for Cloud Computing?

Amazon Web Services, Google Cloud Platform, Microsoft Azure, IBM Cloud, Oracle Cloud, SAP Cloud, Salesforce, Adobe Experience Cloud, Akamai, Cisco Duo, Citrix, VMware, etc.

How to use R Programming on the cloud?

1. Login to Amazon Web Services (AWS) Console
2. Click on Run Instance
3. Choose operating system for your virtual machine that you will access remotely
4. Choose Instance Type (size of RAM and memory needed). See how to compare instances
5. Create a security key. This is needed for a secure connection from your local machine to the remote machine. Note you can use remote desktop for Windows operating systems but you will need to use SSH for Linux instances.
6. Click on Launch Instance
7. Connect to the instance using your security key following the instructions given.
8. Now work on your remote machine just as you would work on a local machine.
9. Filter will give you the list of instances.
10. Choose your work in cloud - remember to please close the instance list you incur high monthly bill.
11. You can check on demand instances, or even have reserved instances (booking a virtual machine for a fixed period of time and thus at a considerable discount).

How to use R on the cloud using RStudio?

1. We installed R already using sudo apt-get install R
2. Download the RStudio server to your virtual machine and then install RStudio Server
3. apt-get install rstudio-server
4. apt-get install rstudio-server
5. apt-get install rstudio-server
6. apt-get install rstudio-server
7. apt-get install rstudio-server
8. apt-get install rstudio-server
9. apt-get install rstudio-server
10. apt-get install rstudio-server
11. apt-get install rstudio-server
12. apt-get install rstudio-server
13. apt-get install rstudio-server
14. apt-get install rstudio-server
15. apt-get install rstudio-server
16. apt-get install rstudio-server
17. apt-get install rstudio-server
18. apt-get install rstudio-server
19. apt-get install rstudio-server
20. apt-get install rstudio-server
21. apt-get install rstudio-server
22. apt-get install rstudio-server
23. apt-get install rstudio-server
24. apt-get install rstudio-server
25. apt-get install rstudio-server
26. apt-get install rstudio-server
27. apt-get install rstudio-server
28. apt-get install rstudio-server
29. apt-get install rstudio-server
30. apt-get install rstudio-server
31. apt-get install rstudio-server
32. apt-get install rstudio-server
33. apt-get install rstudio-server
34. apt-get install rstudio-server
35. apt-get install rstudio-server
36. apt-get install rstudio-server
37. apt-get install rstudio-server
38. apt-get install rstudio-server
39. apt-get install rstudio-server
40. apt-get install rstudio-server
41. apt-get install rstudio-server
42. apt-get install rstudio-server
43. apt-get install rstudio-server
44. apt-get install rstudio-server
45. apt-get install rstudio-server
46. apt-get install rstudio-server
47. apt-get install rstudio-server
48. apt-get install rstudio-server
49. apt-get install rstudio-server
50. apt-get install rstudio-server
51. apt-get install rstudio-server
52. apt-get install rstudio-server
53. apt-get install rstudio-server
54. apt-get install rstudio-server
55. apt-get install rstudio-server
56. apt-get install rstudio-server
57. apt-get install rstudio-server
58. apt-get install rstudio-server
59. apt-get install rstudio-server
60. apt-get install rstudio-server
61. apt-get install rstudio-server
62. apt-get install rstudio-server
63. apt-get install rstudio-server
64. apt-get install rstudio-server
65. apt-get install rstudio-server
66. apt-get install rstudio-server
67. apt-get install rstudio-server
68. apt-get install rstudio-server
69. apt-get install rstudio-server
70. apt-get install rstudio-server
71. apt-get install rstudio-server
72. apt-get install rstudio-server
73. apt-get install rstudio-server
74. apt-get install rstudio-server
75. apt-get install rstudio-server
76. apt-get install rstudio-server
77. apt-get install rstudio-server
78. apt-get install rstudio-server
79. apt-get install rstudio-server
80. apt-get install rstudio-server
81. apt-get install rstudio-server
82. apt-get install rstudio-server
83. apt-get install rstudio-server
84. apt-get install rstudio-server
85. apt-get install rstudio-server
86. apt-get install rstudio-server
87. apt-get install rstudio-server
88. apt-get install rstudio-server
89. apt-get install rstudio-server
90. apt-get install rstudio-server
91. apt-get install rstudio-server
92. apt-get install rstudio-server
93. apt-get install rstudio-server
94. apt-get install rstudio-server
95. apt-get install rstudio-server
96. apt-get install rstudio-server
97. apt-get install rstudio-server
98. apt-get install rstudio-server
99. apt-get install rstudio-server
100. apt-get install rstudio-server

www.analyticsvidhya.com