|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | | Amazon AWS | Google AppEngin | Microsoft Azure | IBM Smart Business Dev. |
| focus | | Speed delivery | Infrastructure | Public cloud | Hybrid cloud |
| Infrastructure and virtualization architecture | | More than 190 countries | Global network | Global network | Hybrid cloud |
| Platforms | | IaaS | PaaS | IaaS+PaaS | IaaS |
| Persistent Storage | | Stores in raw blocks. | can be stored in the form of queries, transactions and sorting. | SQL database , tables ,Blob storage, Redis cache ,StorSimple | Disk drives |
| Monitoring | | Amazon cloud watch | Google cloud monitoring | Batch power shell | IBM smart cloud monitoring |
| Load Balancing | | Helps to achieve a peak level of fault tolerance | Direct the traffic to the application. | Traffic manager(fail over ,performance, round robin) | Simplifies the network and network flow balancing. |
| Message Queues | | Simple | Pull queues | Azure queues | Web message queues |
| Development Tools | | AWS console management,  AWS tool kit for eclipse,  AWS toolkit for Microsoft visual studio. | NetBeans | Azure command line interface | Lotus software,  IBM Watson,  Rational developer for system --Z |
| Integration with other services | | Dynamo DB | Compute engine,  App engine,  Container engineer | Azure CDN (Content delivery network) | RabbitMQ |
| Web APIs | | Yes | Yes | Yes | Yes |
| Programming Framework | | PHP,  Phython,  Ruby,  .net,  java, | Groovy  Beanshell | Ruby  Node | Java |
| Pricing | Machine CPU | 2.3/hour approximately | $0.11 per each hour | $ 0.11 per hour | 0.11 per hour |
| Storage | 20 Gigabytes | $0.16 per each Gigabyte | $ 0.16 per Gigabyte | 0.16 per each Gigabyte |
| I/O | For 1000000 i/o requests it costs $0.10 | $0.11 per each hour | $0.11 per hour | 1000000 input ouput requests |
| Bandwidth | 16 Gigabytes | $0.11 per each Giga byte | $0.12 per each Gigabyte | 16 Gigabytes |

CLOUD COMPUTING-35

The price keeps on changing.it varies with in the range,