|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | | Amazon AWS | Google AppEngin | Microsoft Azure | IBM Smart Business Dev. |
| focus | | Infrastructure | Platform | Platform | Platform |
| Infrastructure and virtualization architecture | | OS level running on a Xen hypervisor | Application container | OS level through fabric controller | IBM Websphere |
| Platforms | | Linux  Windows | Language Specific | Linux  Windows | Linux  Windows |
| Persistent Storage | | Amazon Elastic Block Store | Google Cloud Storage | Azure Drives | IBM Persistent Storage  Similar to (EBS) |
| Monitoring | | CloudWatch | System Status Dashboard | Monitoring Dashboard | IBM SmartCloud Monitoring |
| Load Balancing | | Elastic Load Balancing | Compute Engine Load Balancing | Azure: Load Balancer | Randomized Hydrodynamic |
| Message Queues | | Amazon Simple Queue Service | Push Queues | Azure Queues  Service Bus Queues | Websphere MQ |
| Development Tools | | Toolkits for Eclipse, Visual Studios | Proprietary SDKs | Azure SDKs, .NET, Java, PHP, Python, Ruby, Mobile, Media, Node.js | Rational Tools |
| Integration with other services | | Identity and Access Management (IAM) | Task Queue REST API | Microsoft Integration | Cast Iron Integration |
| Web APIs | | Yes | Yes | Yes | Yes |
| Programming Framework | | Customizable Linux-based Amazon Machine Image (AMI) | Python | Microsoft .NET | Java, Node.js, Ruby |
| Pricing | Machine CPU | $0.14 / hour | $0.10 / hour | $0.12 / hour | $0.10 / hour |
| Storage | $0.25 / GB / month | $0.15 / GB / month | $0.15 / GB / month | $0.15 / GB / month |
| I/O | $0.01 / 1000 requests | $0.12 / GB / month | $0.01 / 1000 requests | $0.01 / 1000 requests |
| Bandwidth | $0.10 / GB | $0.10 / GB | $0.10 / GB | $0.10 / GB |

Cloud Computing Platforms Comparison