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| --- | --- | --- | --- | --- | --- |
|  | | Amazon AWS | Google App Engine | Microsoft Azure | IBM Smart Business Dev. |
| focus | | Public Sector like Government | Developing, deploying and iterating our apps more quickly | Application development | Effective use of energy, resiliency |
| Infrastructure and virtualization architecture | | Availability is high and cost is low | Less cost and less operational considerations | High cost and risk | Low cost |
| Platforms | | Iaas | Iaas  Paas | Iaas  Paas | Iaas  Paas  Saas |
| Persistent Storage | | Amazon Elastic Block store | Queries, transactions sorting | blobs | Standard machine configurations |
| Monitoring | | Amazon cloud watch | System status  Dashboard makes developers to monitor | It is displayed in management portal.  Use of verbose monitoring can increase performance | It monitors health and performance of private cloud infrastructure. |
| Load Balancing | | Elastic Load Balancing provides required load balancing capacity and supports to get fault tolerance. | Performance is stable from start and low cost, easy to setup and maintain | 2levelsof load balancing available are DNS and Network level. It is used for traffic management | It is used to know if any resource is idle while other is using. We can also use this at run time which is called dynamic load balancing |
| Message Queues | | Fast, reliable, scalable, fully managed | It is a mechanism to share information between processes, threads and systems | Service Bus Queues  Azure Services | Queue manager maintains all messaging queues and it maintains integrity |
| Development Tools | | Primary SDKs  IDE Toolkits  Command Line Tools | Eclipse, Intell1J, Maven, Git, Jenkins, PyCharm. | Microsoft .NET Services SDK  Azure SDK | IBM Rational Asset Manager  IBM Designer |
| Integration with other services | | Access some grant services in the cloud | Reduce on map, namespaces | On-premises and Saas systems | IBM cloud manager with open stack |
| Web APIs | | Its performance be high | Use powerful API to store | Yes | Yes |
| Programming Framework | | Java  Ruby | Python 2.7  Java  PHP  Go | ASP .NET  PHP  Node.js | Java  COBOL |
| Pricing | Machine CPU | $0.13/hour | $0.10/hour | $0.12/hour | $0.10/hour |
| Storage | 25 GB/month | 0.15 GB | 0.15 GB | 0.15 GB |
| I/O | $0.10/1000 | $0.12 GB | $0.10/1000 | $0.10/1000 |
| Bandwidth | 15 GB | $0.10 GB | $0.10 GB | $0.10 GB |

Bala Sai Teja Gaddam, Class ID: 15