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| --- | --- | --- | --- | --- | --- |
|  | | Amazon AWS | Google App Engine | Microsoft Azure | IBM Smart Business Dev. |
| focus | | Infrastructure | Platform | Infrastructure, Platform | Platform |
| Infrastructure and virtualization architecture | | EC2 upon which you can instantiate 32 or 64 bit Amazon Machine Images or upload your XEN virtual machine images | Specification provided by google | Servers at back end runs in virtual machines on Windows Azure while front end is in .NET. Servers can be customized according to your specifications | Virtual machine instances-multiple sizes for 32 or 64 bit architectures |
| Platforms | | Linux and Windows Servers | Not Available | Microsoft Server 2008 | Redhat, SUSE and Windows |
| Persistent Storage | | Elastic block storage, Simple storage service | Gdisk - bulk storage | Standard application storage | Bulk storage |
| Monitoring | | Cloud watch | App Engine projects monitoring agent | Management pack | IBM smart cloud monitoring / IBM Tivoli |
| Load Balancing | | Elastic load balancing | Google compute engine | Automatically done or by configuring and using azure load balances | Uses map reducing and local balancing cloud |
| Message Queues | | Simple Queue Service, Simple Message Service | Push Queues memcached | Azure Data Queues | Delivered with IBM WebSphere Message Queue |
| Development Tools | | Web console, Command line API’s for all services, SDK’s for Java, PHP, python and other eclipse plugins | Java plugin for eclipse and Python software development kit(SDK) | Visual Studio and SDK for .NET | Java plugin for eclipse |
| Integration with other services | | All services are designed to work together like the pieces on a chessboard | A number of API’s available like maps, contacts, calendar, etc. | Large number of .NET services including live services | Live chat, Phone |
| Web APIs | | EC2 API, Java API, etc. | Blobstore API, Mail API | .NET web API, ASP .NET API | REST Java API |
| Programming Framework | | Customizable Linux-based Amazon Machine Image | Python | .NET, Java, Node, PHP, Python, Ruby | Java, Node, Ruby |
| Pricing | Machine CPU | $0.11/hr | $0.05/hr | $0.02/hr | - |
| Storage | 1GB | $0.18/GB/month | 400GB-$9.60 | - |
| I/O | 2 million I/Os | Incoming free 1 GB  Outgoing $0.12/GB | Incoming or outgoing $80 | - |
| Bandwidth | 15GB | 1 GB $0.12/month | 12 GB $0.84 | - |