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Welcome to the Dynamic Cloud

Dynamic Concepts announces the immediate availability of a comprehensive suite of Managed Cloud Services to provide customers with new choices for their IT infrastructure. Dynamic selected Amazon Web Services [AWS] to host the Dynamic Cloud, as Amazon is by far the largest and most advanced cloud infrastructure available.

AWS allows Dynamic to offer a broad set of global compute, storage, database, analytics, application, and deployment services to help your organization move faster, lower IT costs, and scale applications. These services are trusted by the largest enterprises and the hottest start-ups to power a wide variety of workloads including: web and mobile applications, data processing and warehousing, storage, archive, and many others.

Dynamic continuously invests in AWS training, Best Practices and certifications. Dynamic is an authorized AWS Consulting Partner and certified in Architecture and Sys-Ops. We are in the process of migrating existing data center operations and deploying new customers at a rapid pace. With dozens of Private Clouds and hundreds of instances, Dynamic can ensure your transition to AWS is seamless.

For customers choosing Dynamic to manage their cloud operations, we provide a custom portal to view and manage running servers; reboot, shutdown, snapshot and terminate instances on demand as well as review real-time performance graphs for each running instance. The portal is constantly expanding and will soon allow launching new instances, test servers, as well as mounting specific backups for individual file review and retrieval.

Some of the many benefits to AWS Cloud Computing include:

- Easy To Use - Quickly and Securely host applications and databases.
- Reliable – Take advantage of a scalable, reliable and secure global computing infrastructure, the virtual backbone of amazon.com's multi-billion dollar online business and other renowned services, including NetFlix and DropBox.
- Flexible – Select the Operating System, programming language, application platform, database and other services you need to run your enterprise. No need to over-purchase dedicated hardware based upon 'worst case' requirements. Deploy only what you need and scale up or down in minutes.
- Scalable – Using AWS tools, Auto Scaling and Elastic Load Balancing, your applications can automatically fail over, or scale up or down based on demand. Backed by a massive infrastructure, you have access to virtually unlimited compute and storage resources when you need them.
- Cost-Effective – You pay only for the compute power, storage and other resources you use with no long-term contracts or up-front capital investment. Backup and Disaster Recovery

servers are deployed on the smallest possible server. In the unlikely event of a disaster or failover, a DR servers is rebooted with the capacity needed for production in minutes.

- Secure – AWS utilizes an end-to-end approach to secure and harden its infrastructure including physical, operational and software measures.
- Compliance – As you build systems on top of AWS, compliance responsibilities are shared. AWS Compliance provides assurance related to the underlying infrastructure; you only own the compliance initiatives related to what you deploy.

AWS Assurance Programs



AWS delivers its services in the US from Virginia, San Francisco and Oregon. Internationally, choices include Singapore, Europe (Ireland), Asia/Pacific (Sydney), Japan or South America (Sao Paulo) This worldwide coverage allows you to place your server instances close to your customers. Geographic redundancy allows you to backup and automatically failover services to other data centers and/or isolated geographic regions.

Leveraging the power of the Cloud gives you immediate access to technology, security and redundancy previously affordable only by governments and the largest corporations. Your data volumes are replicated across redundant storage arrays and backups are replicated to multiple data centers within each region. Should a data center fail completely, your instances can be restarted in another using your most recent backup.

Applications utilizing relational databases may take advantage of AWS services that automatically backup, fail over and are redundant across multiple data centers - without having to build and manage your own multi-server DB infrastructure.

Backups within the cloud are customizable. Our standard plan performs daily backups for 14 trailing days, weekly backups for a month and monthly backups kept for a year. Backup space is unlimited and historical data can be rotated to off-line storage for years for literally pennies per GB.

The Dynamic Cloud is completely elastic, allowing you to scale storage and computing needs – both up and down – in minutes rather than hours. Cloud resources are billed by the hour and you only pay for what you use. Need additional disk space permanently or temporarily? Simply add another volume or expand existing ones. Is your server under or over powered for your workload? Reboot with more or less CPU or memory capacity. You can even schedule to automatically turn off non-critical servers on nights and weekends and have them auto restart each business day saving even more.

Need to test a major software upgrade prior to putting it into production? Take a snapshot of your production server and bring up a test server in minutes rather than hours. And, since you only pay for what you use, you only incur server charges for the test server while it is running. Turn it off or release the server once you are done with your testing.

Dynamic's Cloud Service offerings fall into three distinct areas:

- **Architecture.** Dynamic designs and implements your Private Cloud complete with firewalls, VPN's, server instances for your applications, database servers, security layers and backup strategy. Your Private Cloud is built within your own AWS account for direct billing, providing you with AWS Management Console access and 24/7 Amazon support. Dynamic can also provide management, support and monitoring of your Private Cloud with support as required.
- **Private Cloud.** Dynamic designs, implements and manages your Private Cloud end-to-end, complete with firewalls, VPN's, server instances for your applications, database servers, security layers and backup strategy. Your private Cloud is segregated from other customers and built under a separate account - fully managed, monitored and supported by Dynamic.
- **Public Cloud.** Dynamic deploys and manages your server instances, data, backups and monitoring within Dynamic's Private Cloud. This option is well suited for customers with a single server, such as web or email. Firewalls are available for each server, but VPN is not.

For SAAS and Enterprise organizations, Dynamic designs your Private Cloud to be redundant across multiple data centers and/or regions protecting you from business from geographic outages.

The example on the following page illustrates a redundant deployment across two separate data centers in any region. The three production Application Servers on the left are configured to meet the customer loads and demands. Those same productions servers in Data Center B on the right are small instances capable of data synchronization and limited load for testing.

Rather than deploying local database server(s) in each data center, this example leverages Amazon's Relational Database Service with automatic synchronization, backup and failover.

In the event of a disaster, the load-balancer can automatically direct a reboot and resizing of the Application Servers and divert traffic to Data Center B.

For applications that cannot automatically failover without loss of data, user decisions and intervention is the preferred failover mechanism.