MessageSolution™
Enterprise Archiving, eDiscovery, Migration

Microsoft Azure Cloud Integration
Infrastructure & Technical Overview

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Introduction

As a decade-long Microsoft Partner, MessageSolution has always been on the cutting-edge of Microsoft integration. With the increasing popularity of cloud computing and the industry push towards Microsoft Azure, MessageSolution has adapted its award-winning enterprise archiving and eDiscovery platforms to ensure client organization can reap the many benefits of Microsoft's resources, infrastructure, and technical development.
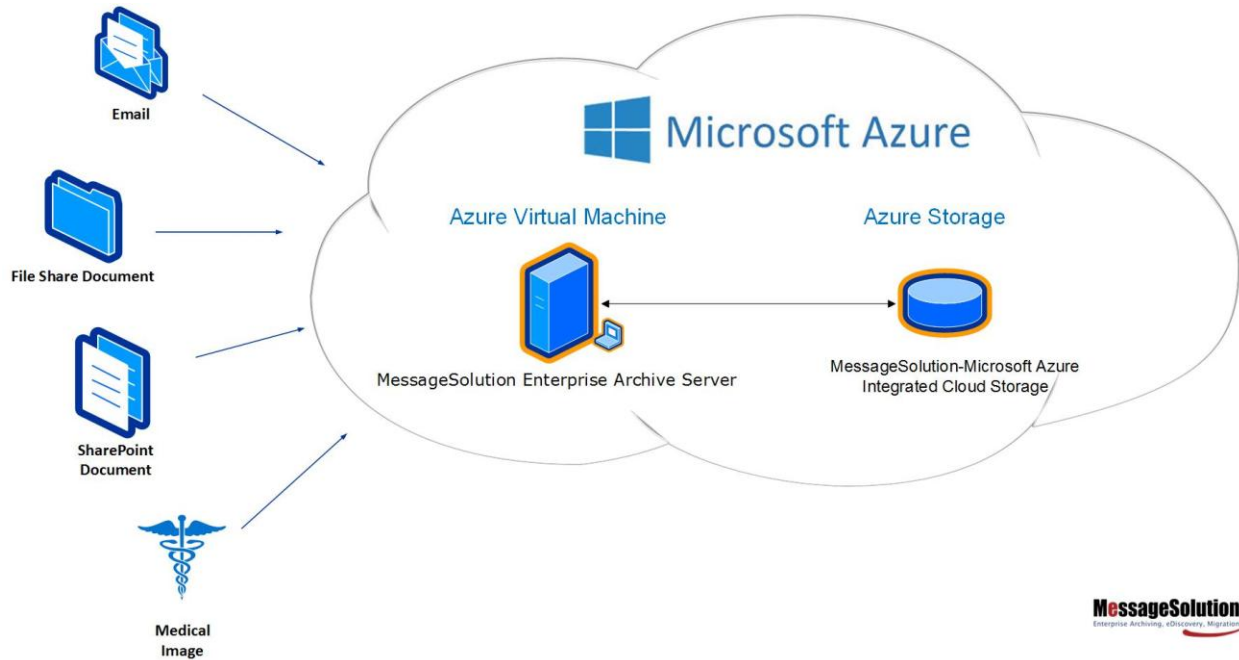
MessageSolution Enterprise Archive (MEA) integrates with Microsoft Azure in two distinct capacities; Azure cloud data storage and Azure computing. While most advanced solutions support Azure storage integration, MessageSolution is one of the only platforms that can actually be hosted in Azure. This allows organizations to take advantage of lower storage and operational costs, centralized application management, and centralized storage for multiple applications.

Microsoft Azure Cloud

Microsoft Azure is a cloud computing platform and infrastructure created by Microsoft, for building, deploying and managing applications and services through a global network of Microsoft-managed datacenters. Azure supports multiple programming languages and provides both PaaS (Platform as a Service) and IaaS (Infrastructure as a Service) services. Subscribing to Azure grants organizations access to resources, cloud storage, infrastructure and computing power, experience, an international network, etc. to ensure data protection and optimized system management for lower costs.

Note: to leverage Microsoft Azure, organizations will need a corporate Azure account and a storage account with active MSDN subscription, or simply subscribe MessageSolution Cloud Archive Azure Edition, the online cloud archiving and eDiscovery services managed by MessageSolution on Azure cloud platform.

MessageSolution Enterprise Archive
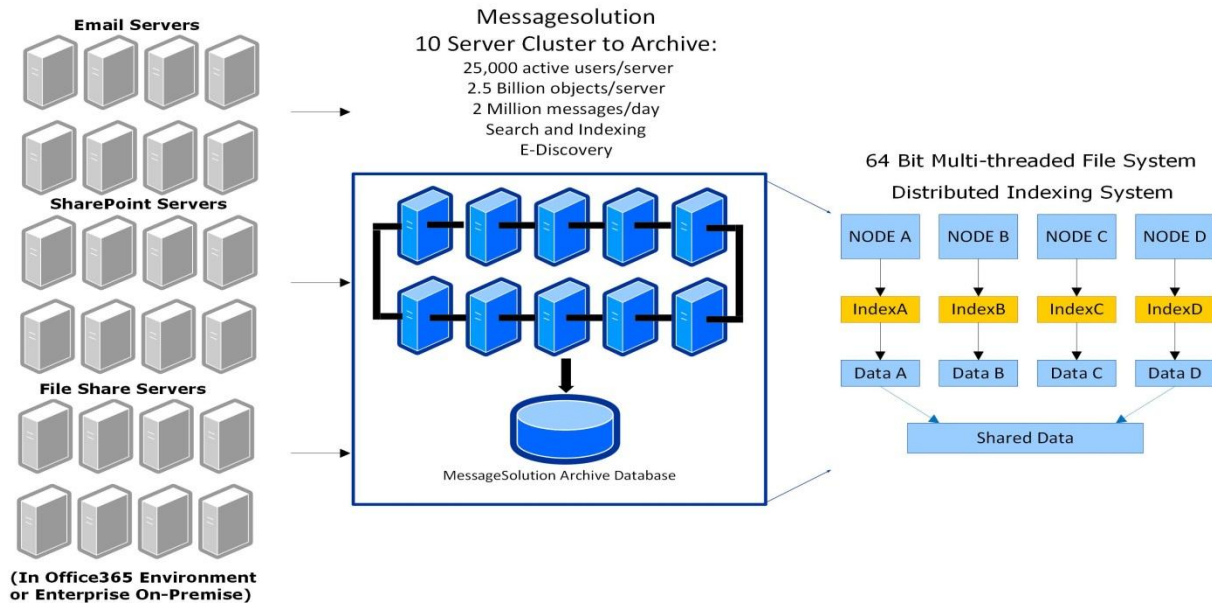# Hosted in Azure Cloud

Implementing MessageSolution Enterprise Archive in existing corporate Azure accounts is ideal for many reasons. First of all, it's convenient; organizations are already Azure users. This also enables centralized admin-level management and storage for all Azure applications to lower operational costs. Finally, like all cloud models, it outsources VM management and lets organizations utilize existing, high-powered infrastructure. MessageSolution is currently one of the only vendors able to provide Azure-hosted archiving for the corporate clients.

MessageSolution Multi-Tenant Platform for Hosting Environment in Azure
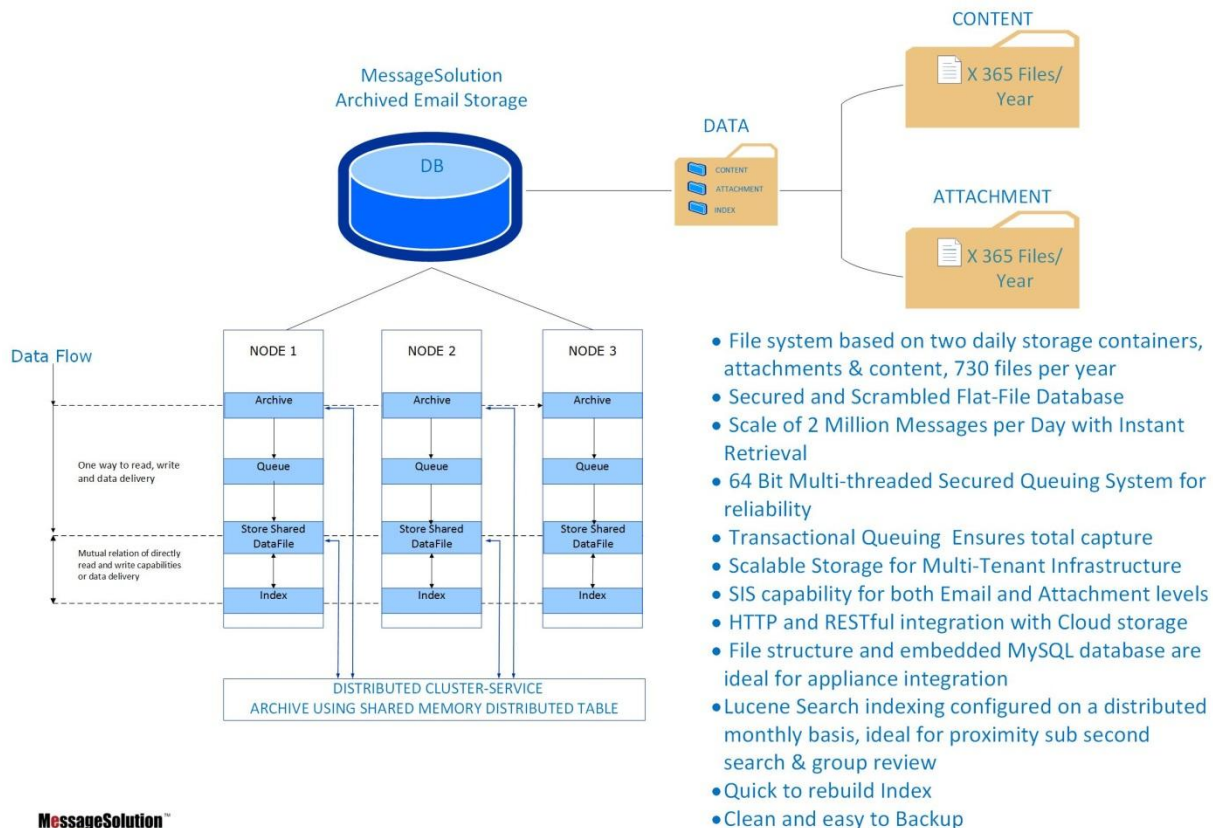(Hosted by MessageSolution as its Cloud Archive or by Service Providers)
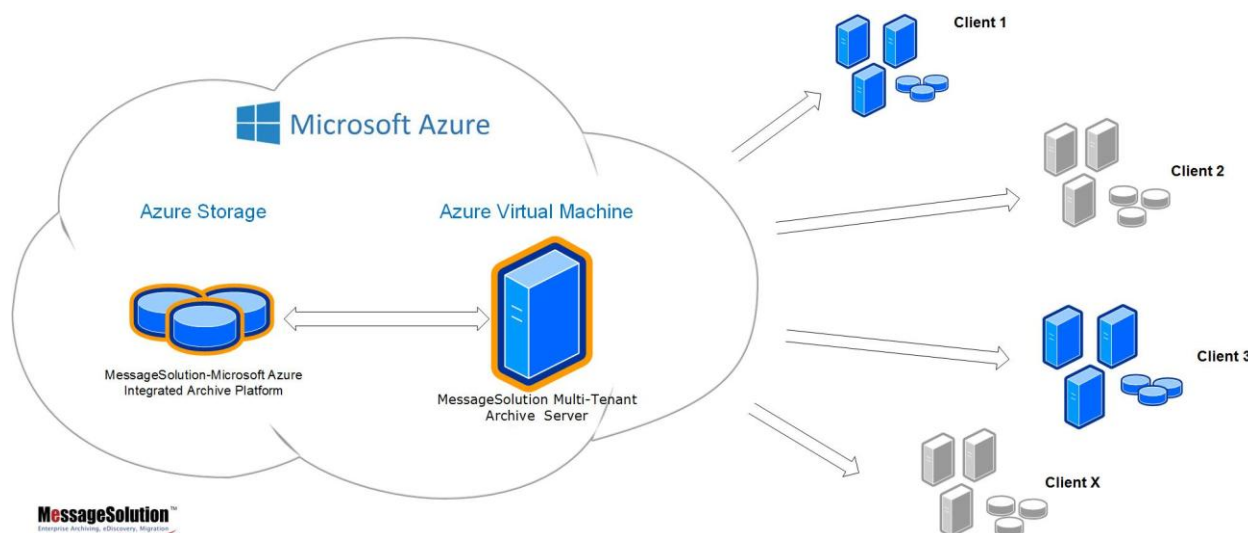
MessageSolution Archiving Platform Scalability
10-Server Cluster Archive for 250,000 Users, and 5-Cluster Archive Platform for 1 Million Active User Environment

Email Servers

SharePoint Servers

File Share Servers

(In Office365 Environment or Enterprise On-Premise)

Messagesolution
10 Server Cluster to Archive:
25,000 active users/server
2.5 Billion objects/server
2 Million messages/day
Search and Indexing
E-Discovery

MessageSolution Archive Database

64 Bit Multi-threaded File System
Distributed Indexing System

NODE A	NODE B	NODE C	NODE D
IndexA	IndexB	IndexC	IndexD
Data A	Data B	Data C	Data D

Shared Data

MessageSolution Backend Architecture For unstructured high volume data archiving and storage

MessageSolution
Archived Email Storage

DB

DATA
CONTENT
ATTACHMENT
INDEX

CONTENT
X 365 Files/ Year

ATTACHMENT
X 365 Files/ Year

Data Flow

NODE 1	NODE 2	NODE 3
Archive	Archive	Archive
Queue	Queue	Queue
Store Shared DataFile	Store Shared DataFile	Store Shared DataFile
Index	Index	Index

One way to read, write and data delivery

Mutual relation of directly read and write capabilities or data delivery

DISTRIBUTED CLUSTER-SERVICE
ARCHIVE USING SHARED MEMORY DISTRIBUTED TABLE

- File system based on two daily storage containers, attachments & content, 730 files per year
- Secured and Scrambled Flat-File Database
- Scale of 2 Million Messages per Day with Instant Retrieval
- 64 Bit Multi-threaded Secured Queuing System for reliability
- Transactional Queuing Ensures total capture
- Scalable Storage for Multi-Tenant Infrastructure
- SIS capability for both Email and Attachment levels
- HTTP and RESTful integration with Cloud storage
- File structure and embedded MySQL database are ideal for appliance integration
- Lucene Search indexing configured on a distributed monthly basis, ideal for proximity sub second search & group review
- Quick to rebuild Index
- Clean and easy to Backup

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Azure BLOB Storage

Short for binary large object, a BLOB is a collection of binary data stored as a single entity designed to effortlessly store large amounts of varied, unstructured data. Organizations can leverage Azure's BLOB Storage with MessageSolution-hosted, or service provider hosted, or self-hosted in Azure BLOB Storage.

Here are some of the advantages of BLOB Storage:

Scalability

Azure Blob Storage supports a massively scalable BLOB distribution system via the Azure CDN. You can also find more information in the "Azure Storage Scalability and Performance Targets" article. The CDN serves hot BLOBs from many servers to scale out and meet the traffic needs of your application. Furthermore, the system is highly available and durable.

High Availability/Fault Tolerance:

BLOBs stored on Azure are replicated to three locations in the same data center for resiliency against hardware failures. Additionally, your data is replicated across different fault domains to increase availability as with all Azure storage services.

Disaster Recovery:

Azure allows companies to choose between geo-redundant and locally redundant replication in case of a major disaster. To learn more, read the "How to: Manage Storage Account Replication" article.

Security:

Every request you make to the Azure storage services must be authenticated unless it is an anonymous request against a public container resource. See "Authenticating Access to Your Storage Account" for more details.

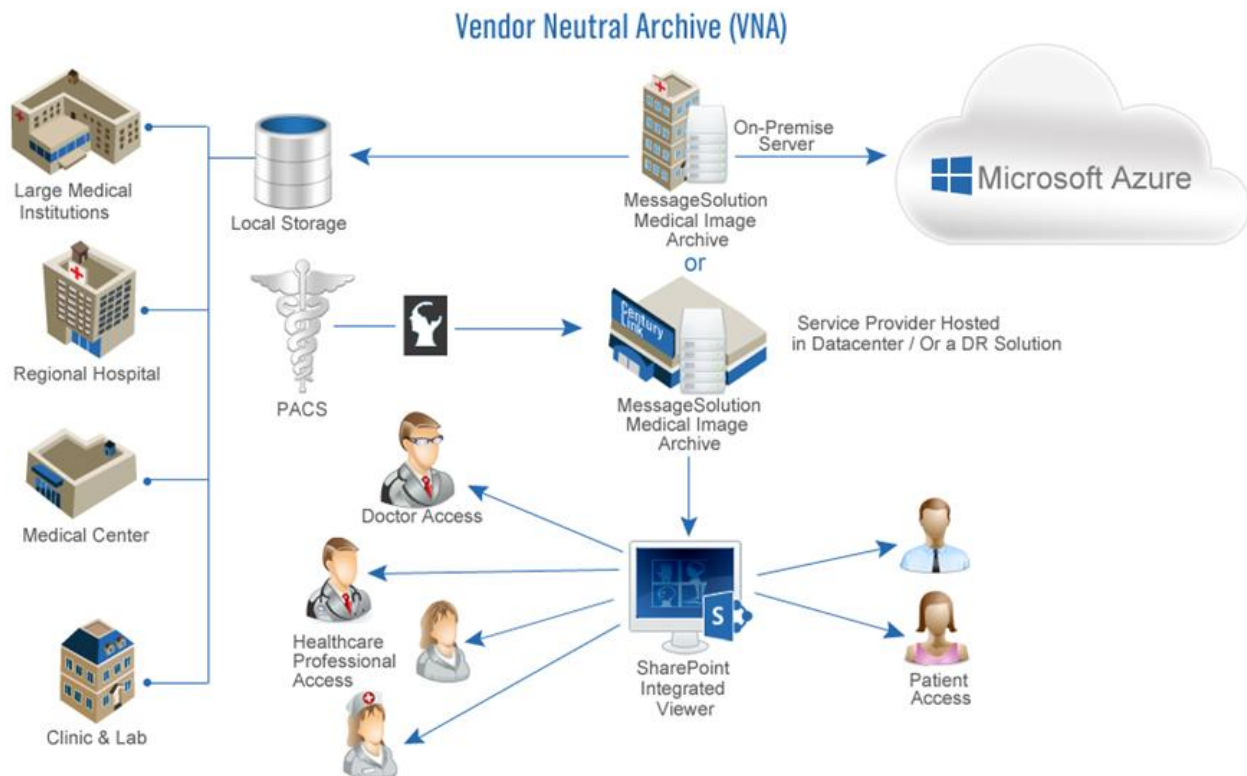**Data Access from Any Client, Anywhere:**

Azure Blob Storage can be accessed using the REST API via HTTP. Any client application on any operating system can access the BLOB storage using REST.

http://msdn.microsoft.com/en-us/library/azure/jj156142.aspx
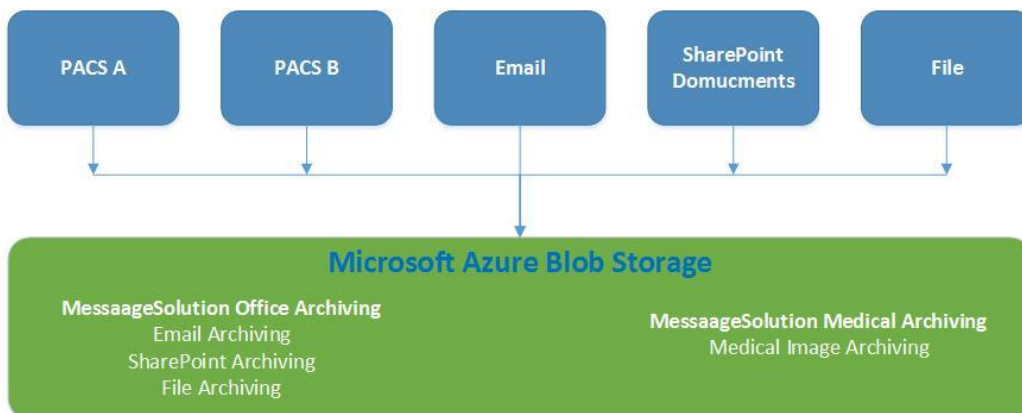
Medical Image Archiving

MessageSolution Medical Image Archive, empowered by its intimated integrations with Microsoft Azure Cloud Storage as well as with SharePoint platform, delivering healthcare market the one-and-only VNA (vendor neutral archive) solution to leverage organizations investment in SharePoint implementation to access and view the medical images inside SharePoint, and store the large amount of image data in Azure Cloud Storage.

Medical Images
Explosive Data Growth in the $27 Billion (2012) IT Service Market
- 600,000,000 new images performed every year in the U.S. alone
- 40% storage growth annually
- The healthcare providers' hardware PACS (Picture Archive & Communication Systems) are obsolete and expensive to upgrade
- Costly storage for today's large amount of image data moving forward

Source: American Society of Radiologic Technologist 2013

About MessageSolution, Inc.

MessageSolution, Inc. is an international technology leader in enterprise-class information archiving and eDiscovery solutions, delivering award-winning packaged software solutions for email, SharePoint, file system environments, and for legal discovery requirements. Available as on-premise, Cloud-based and service provider-hosted platforms, MessageSolution provides advanced, policy-based archiving and legal eDiscovery solutions to enforce regulatory compliance, regulated data management and high data accessibility for eDiscovery readiness. MessageSolution Platform is intuitive and user-friendly. It offers a seamless solution for searching and accessing archived data. With industry-leading scalability, MessageSolution delivers the ideal solution for both SMEs and international enterprise organizations.

Founded in 2004, MessageSolution is headquartered in Milpitas, California in the heart of Silicon Valley with offices in Castro Valley, California, and Beijing, China. MessageSolution maintains operations in North America, Europe, and Mainland China, along with distribution channels established in North America, Europe, Australia, Africa, and Asia Pacific.

MessageSolution has an intricate network of clients, enterprise information archive and eDiscovery solution resellers, advanced managed service providers and Elite Premium Alliance Partners all across the world. Organizations from all industries, including multiple levels of government, healthcare providers, law firms and even a professional football team, leverage our unique software and dedicated services to manage their archiving and eDiscovery needs.