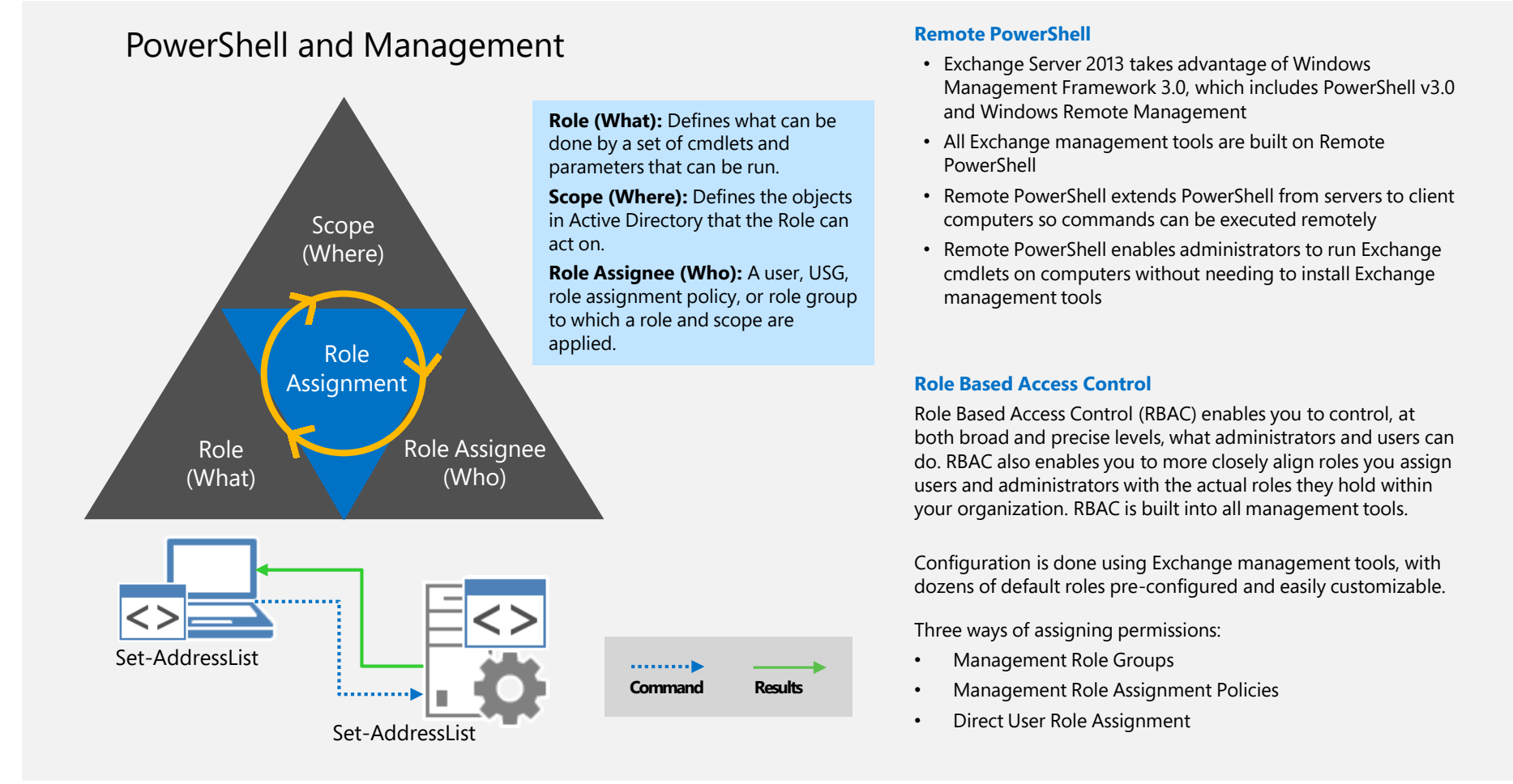
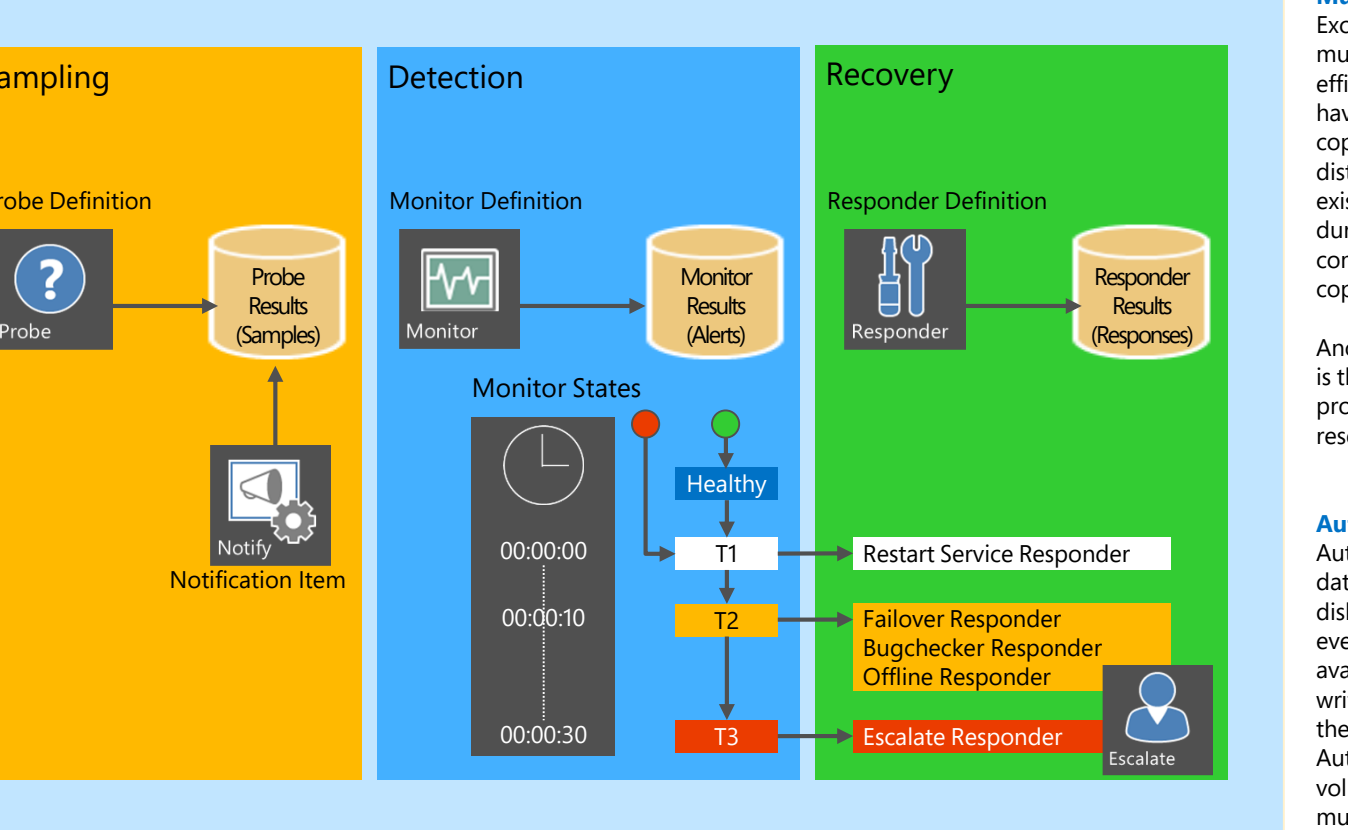
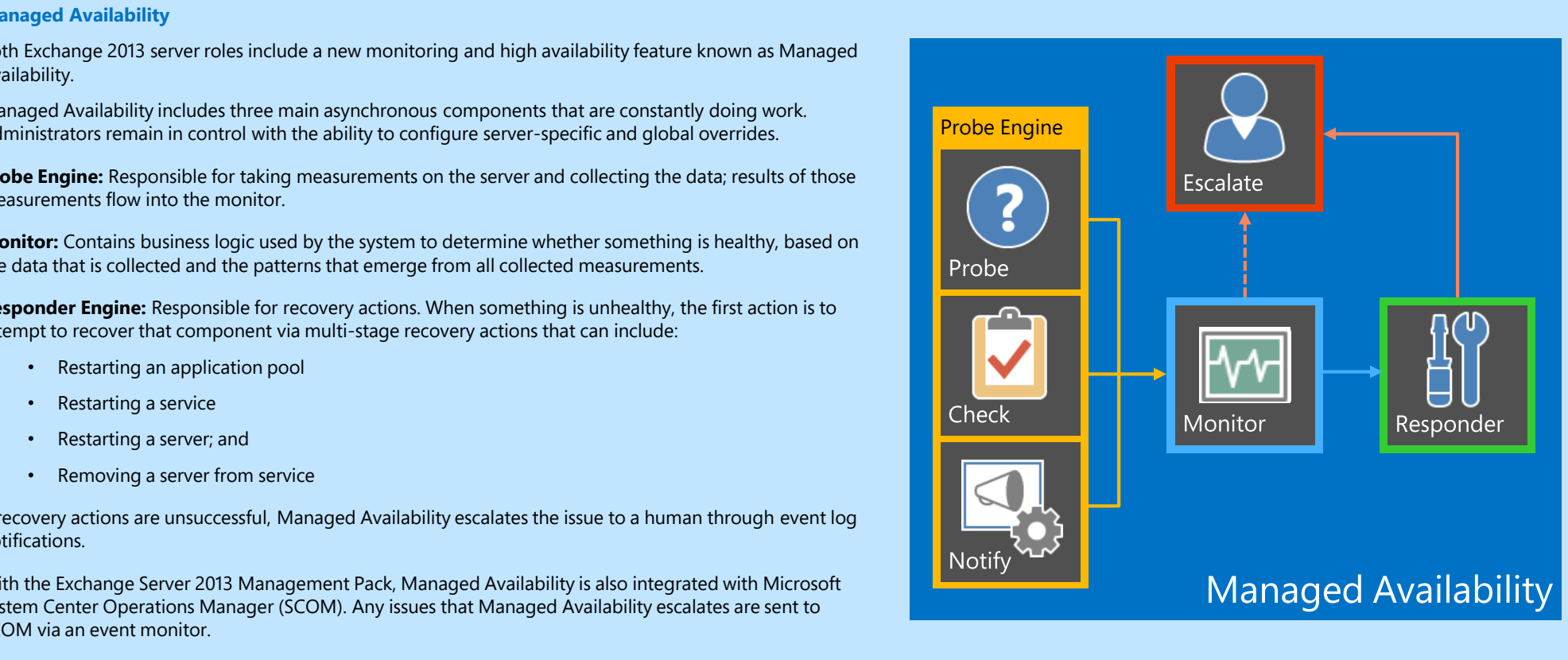
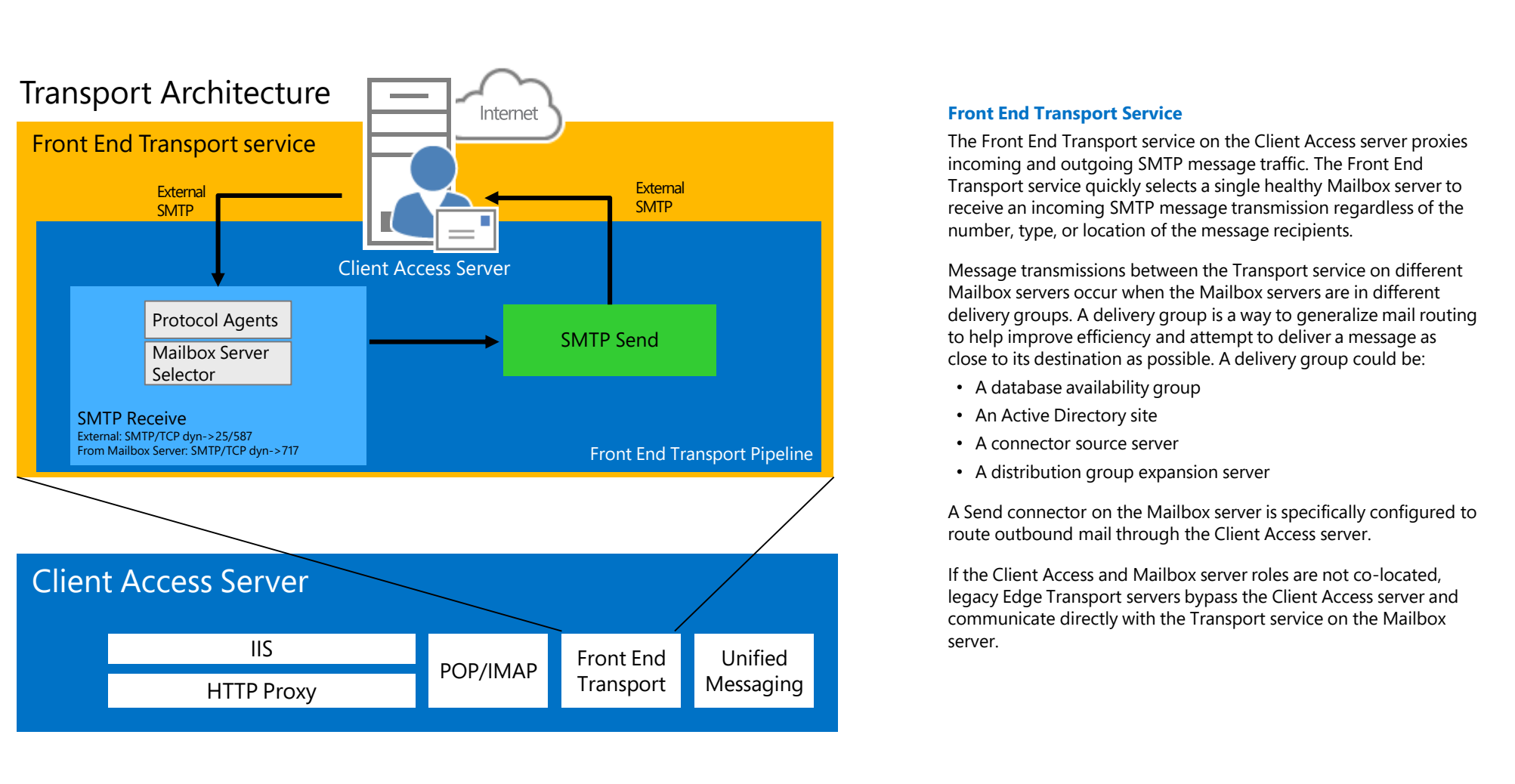
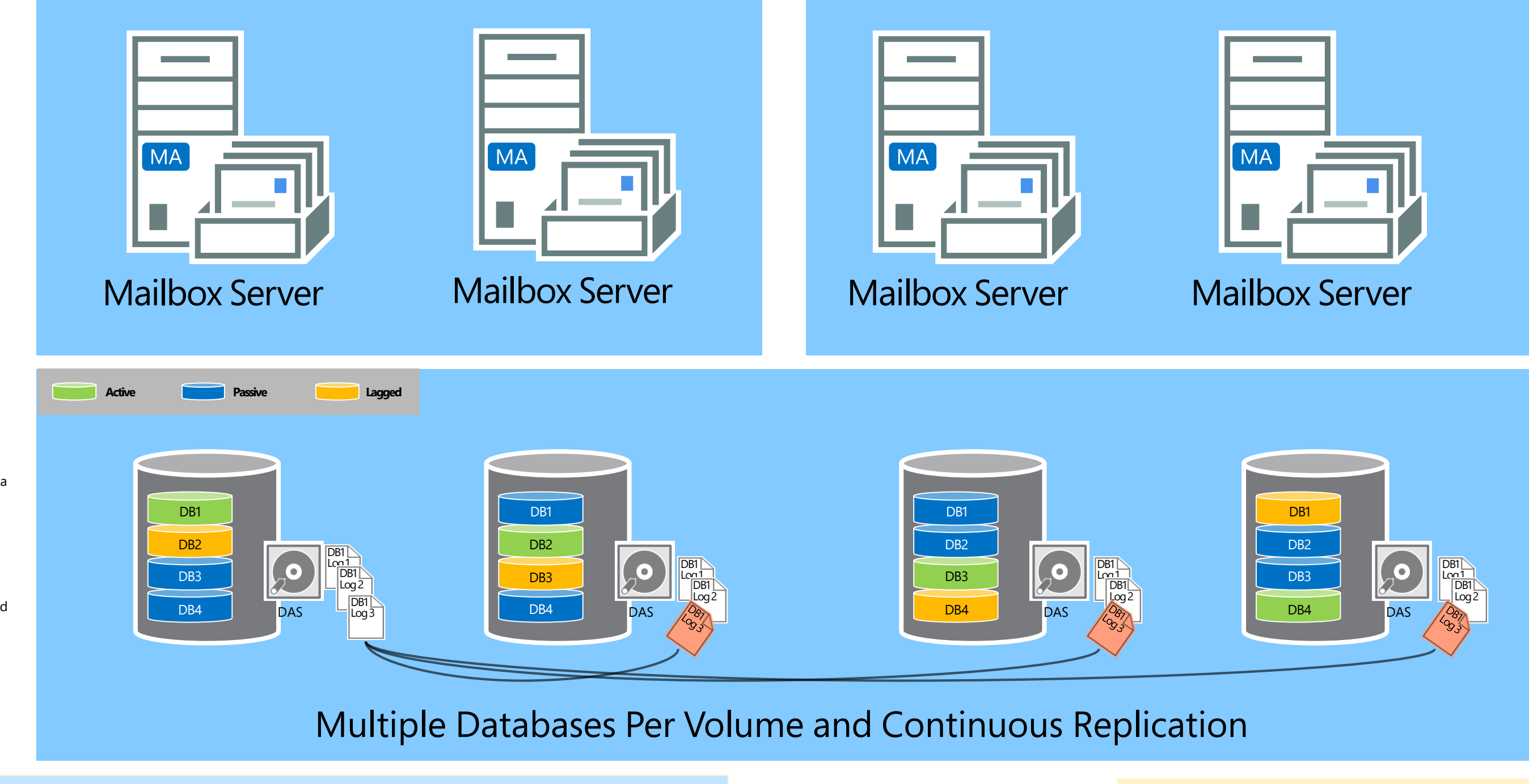
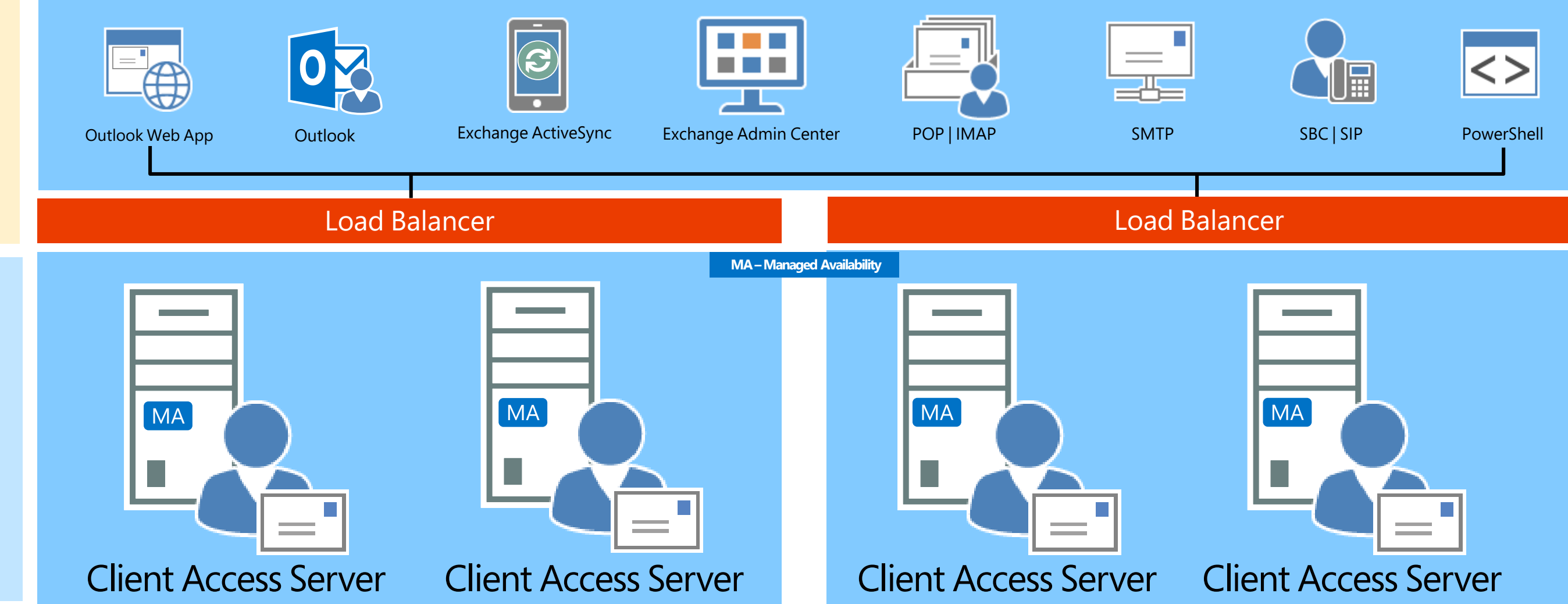


- ### SharePoint eDiscovery Center
- Perform eDiscovery searches across SharePoint 2013 sites, documents, and file shares; Exchange Server 2013 mailboxes; Lync 2013 archived conversations and meetings stored in Exchange 2013
 - Place an In-Place Hold on Exchange 2013 mailboxes and SharePoint 2013 sites
 - OAuth authentication (service and user impersonation)
 - Uses Exchange 2013 Role Based Access Control (RBAC) permissions for eDiscovery searches from SharePoint 2013
 - Multi-Mailbox Search API to search mailbox content
 - Preview search results
 - Export eDiscovery search results (from Exchange) to PST files) with appropriate metadata stored in EDMR XML
- ### Lync Archiving
- Archives Lync 2013 conversations and meetings in Exchange 2013 mailboxes
 - OAuth authentication
 - Archive conversations using EWS
 - Compliance management (Hold and eDiscovery) of Lync content using Exchange 2013
 - Unified Contacts Store, with Lync 2013 contacts stored in Exchange 2013 mailbox
- ### Site Mailboxes
- Functionally comprised of SharePoint 2013 site membership (owners and members), shared storage through an Exchange 2013 mailbox for email messages and a SharePoint 2013 site for documents, and a management interface that addresses provisioning and lifecycle needs
 - AutoDiscover to determine CAS endpoints
 - OAuth authentication (service and user impersonation)
 - Site Mailboxes provisioned and managed from SharePoint 2013
 - SharePoint Team Site documents displayed in Site Mailboxes in Outlook 2013
 - Inbox messages can be read from SharePoint 2013
 - REST (Representation State Transfer) API used to synchronize updates from SharePoint to Site Mailbox over HTTPS
- ### User Photos
- SharePoint 2013, Lync 2013 client, and Outlook 2013 use the Outlook Web App Options page to add or update user photos
 - High-resolution user photos stored in Exchange 2013 mailbox; Low-resolution user photos stored in Active Directory
 - User photos accessed by Outlook Web App, Outlook, SharePoint 2013, and Lync 2013

- ### Client Access Protocols
- #### Exchange Web Services
- Exchange Web Services (EWS) provides the functionality to implement client applications that access and manipulate Exchange store items
 - EWS provides programmatic access to the data stored within Exchange
 - EWS clients can integrate Exchange information into line-of-business (LOB) applications
 - SOAP provides the messaging framework for messages sent between the client application and the Exchange server
 - The Managed API provides an easy way to use the Microsoft .NET interface with EWS
- #### Exchange ActiveSync
- Allow/Block/Quarantine List
 - Approved device list (by device type or by user)
 - Block an unsupported device
 - Quarantine and notify
 - Configure multiple mobile device mailbox policies
 - PIN policies and local device wipe
 - Remote device wipe
- #### Outlook Web App
- Redesigned for Exchange 2013
 - New user interface that focuses on content
 - Supports all major Web browsers
 - Enhanced contacts and calendaring functionality including Agenda view
 - New Offline Mode
 - Three views for Outlook Web App in the browser:
 - Phone view (1-column touch UI)
 - Tablet view (2-column touch UI)
 - Traditional Desktop view (3-column mouse-based UI)
 - Inline reply for Desktop view
 - Extensibility Improvements Apps, such as the Bing Maps apps for Outlook add features to the overall experience
- #### Outlook Connectivity
- In Exchange 2013, RPC/TCP has been removed and all Outlook connections take place via Outlook Anywhere (RPC over HTTP). This provides several benefits:
- Simplifies the protocol stack
 - Provides a reliable and stable connectivity model
 - Maintains the RPC session on the Mailbox server that hosts the active copy of the user's mailbox
 - Eliminates the need for the RPC Client Access Array and its namespace
 - User photos accessed by Outlook Web App, Outlook, SharePoint 2013, and Lync 2013



- ### Mailbox Server
- Server that hosts mailbox databases and components previously associated with other Exchange Server 2007/2010 server roles (Unified Messaging, Client Access, Hub Transport) are hosted on the Mailbox server. All processing for a specific mailbox happens on the Mailbox server that hosts the active copy of the user's mailbox. Client connectivity takes place through the Client Access server.
- #### In-Place Archive
- Provides users with an alternate storage location to store historical messaging data
 - Appears below the user's primary mailbox in Outlook or Outlook Web App
 - Search across primary and archive mailboxes in Outlook and Outlook Web App
 - Sets archive quota separately from primary mailbox
 - Exchange Online Archiving provides a cloud-based archive for on-premises mailboxes
- #### In-Place Hold
- Query-based In-Place Hold on specific items in a mailbox-based query (keywords)
 - Time-based In-Place Hold retains items for a specified duration
 - Litigation Hold, a legacy feature, can also be used to place an indefinite hold on the user's mailbox
- #### In-Place eDiscovery
- Enables use of the NEAR operator, allowing you to search for a word or phrase that's in proximity to another word or phrase
 - Enhanced management experience and search query improvement
 - Preserves the results of the query which allows for scoped immutability across mailboxes
 - Federated discovery using the SharePoint eDiscovery Center allows you to search and preserve data across Exchange, SharePoint, and Lync
 - Using Exchange 2013 only, you can create a discovery search using the Exchange admin center or Exchange Management Shell
 - Primary and Archive mailboxes are searched, including items in the Recoverable Items folder
- #### Recoverable Items Folder
- These folders are not visible to the user. They include the Audits sub-folders, which contain mailbox audit and calendar logging entries.
- Deletions:** Items soft-deleted from Deleted Items folder. Accessed through Outlook "Recover Deleted Items"
 - Versions:** Original and modified copies of items when either In-Place Hold or Single Item Recovery are enabled
 - Purges:** Hard-deleted items when either In-Place Hold or Single Item Recovery are enabled
 - Discovery Holds:** Data that matches the In-Place Hold criteria is saved to this folder in Exchange 2013.
- #### Types of Mailboxes
- There are several types of mailboxes in Exchange 2013:
- Arbitration:** Used for handling moderated recipients and distribution group membership approval
 - Archive:** Used as a secondary mailbox for users
 - Discovery Search:** Used to store results from an In-Place eDiscovery search
 - Equipment:** Used for resources that are not location specific, such as a portable computer, projector, microphone, or a company car
 - Room:** Used with room-based solutions, such as Lync Room Systems
 - Linked:** Used for users in a separate, trusted forest
 - Public Folder:** Used for public folders and public folder content
 - User:** User for typical user to send, receive and store messages, appointments, tasks, notes, and documents
- #### Managed Store
- The Managed Store is the name of the new Information Store in Exchange 2013. The Managed Store is written in C# and tightly integrated with the Microsoft Exchange Replication service (MSExchangeRepl.exe). It leverages a worker process model and a static database caching algorithm to provide higher availability through failure isolation and improved resiliency.
- #### Exchange Search
- Exchange Search is different from full-text indexing available in previous versions of Exchange Server. Exchange Search includes numerous innovations in performance, content indexing, and search. New items are indexed in the transport pipeline or almost immediately after they're created or delivered to the mailbox, providing users with a fast, stable, and more reliable way of searching mailbox data. Content indexing is enabled by default, and there's no initial setup or configuration required.
- The underlying content indexing engine has been replaced with Microsoft Search Foundation, which provides performance and functionality improvements and serves as the common underlying content indexing engine in Exchange 2013 and SharePoint 2013.



- ### High Availability Message Flow
- A Mailbox server receives a message from any SMTP server that's outside the Transport high availability boundary. The Transport high availability boundary is a database availability group (DAG) or an Active Directory site in non-DAG environments.
 - Before acknowledging receipt of the primary message, the primary Mailbox server initiates a new SMTP session to a shadow Mailbox server within the Transport high availability boundary and makes a shadow copy of the message. In DAG environments, a shadow server in a remote Active Directory site is preferred.
 - The primary server processes the primary message and delivers it to users within the Transport high availability boundary or relays it to the next hop. The primary server queues a discard status for the shadow server that indicates the primary message was successfully delivered, and the primary server moves the primary message into the local Primary Safety Net.
 - The shadow server periodically polls the primary server for the discard status of the primary message.
 - When the shadow server determines the primary server successfully delivered the primary message or relayed it to the next hop, the shadow server moves the shadow message into the local Shadow Safety Net.
 - The message is retained in the Primary Safety Net and the Shadow Safety Net until the message expires.

