

# Fundamentals of Sites and Hierarchies for Configuration Manager

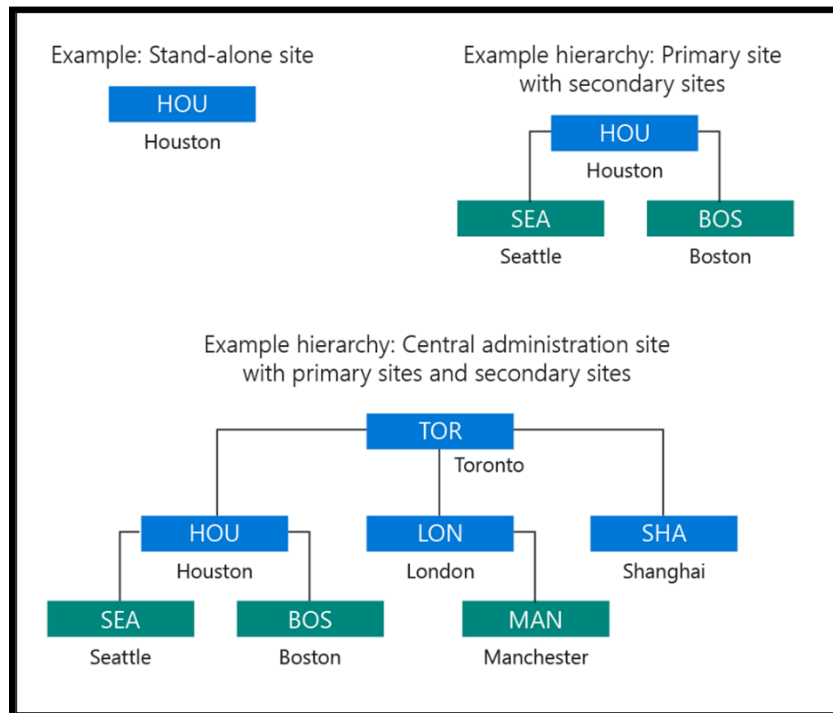
- A Configuration Manager deployment must be installed in an **Active Directory Domain**. The foundation of this deployment includes **one or more Configuration Manager Sites** that form a hierarchy of sites.
- Microsoft Configuration Manager, a part of Microsoft Intune which was formerly called as SCCM **helps IT administrators manage large groups of Windows-based computers**. It provides tools for software deployment, update management, OS deployment, inventory and more.
- **SCCM (System Center Configuration Manager)**: It is a **Microsoft tool** used by IT administrators to manage computers, applications and updates across an organization. SCCM helps companies install software, apply updates and manage systems on hundreds or thousands of computers all from one central place.

## Hierarchies of Sites:

The Configuration Manager site is the foundation from which you will manage devices and users in your enterprise. This first site must be either a **central administration** site or a **stand-alone primary** site.

- **Central Administration Site (CAS)**: A central administration site is suitable for **large-scale deployments**, provides a **central point of administration** and provides the **flexibility** to support devices that are distributed across a global network infrastructure, but does not directly manage devices. For that you must **install child-primary sites** under it to manage devices.
- **Stand-Alone Primary Site**: A stand-alone primary site is suitable for **smaller deployments** and can directly manage devices without requiring additional sites. Although it has **limitations** in terms of **deployment size**, **it supports future scalability**. You can later expand it by installing a central administration site above it, at which point the stand-alone site becomes a child-primary site. Additional child-primary sites can then be added under the central administration site to support the growing needs of the enterprise.

- Secondary Site:** A secondary site can only be installed as a **child site under a primary site** and is used to extend the primary site's reach to remote locations with slow network connections. Although the secondary site **supports** local data transfer by compressing and managing the flow of information between the client and site, the **primary site still manages all clients**. Secondary sites help **reduce** network load and improve deployment performance in geographically distant or bandwidth-limited areas.



## Site System Servers and Site System Roles:

- Each Configuration Manager site includes default site system roles such as the **site server role** (assigned to the computer where the site is installed) and the **site database server role** (assigned to the SQL Server hosting the site database).
- Additional site system roles are optional and only required when their specific functionality is needed.
- Any computer hosting one or more of these roles is called a **site system server**.
- In small deployments, all roles may run on a single server but as the environment grows roles can be distributed to other site system servers to improve performance and scalability.