

Fundamentals of Sites and Hierarchies for Configuration Manager

1. Overview

A Configuration Manager deployment must be installed in an Active Directory domain. The backbone of this deployment consists of one or more sites forming a hierarchy. This structure allows for scalability and efficient management of users and devices across geographic locations.

2. Hierarchies of Sites

The first site installed in a Configuration Manager deployment determines the overall structure of the hierarchy. There are two main types of initial sites:

Central Administration Site (CAS):

- Designed for large-scale, global environments.
- Acts as the top-level administrative point.
- Cannot manage clients directly.
- Requires one or more child-primary sites to manage clients.

Stand-Alone Primary Site:

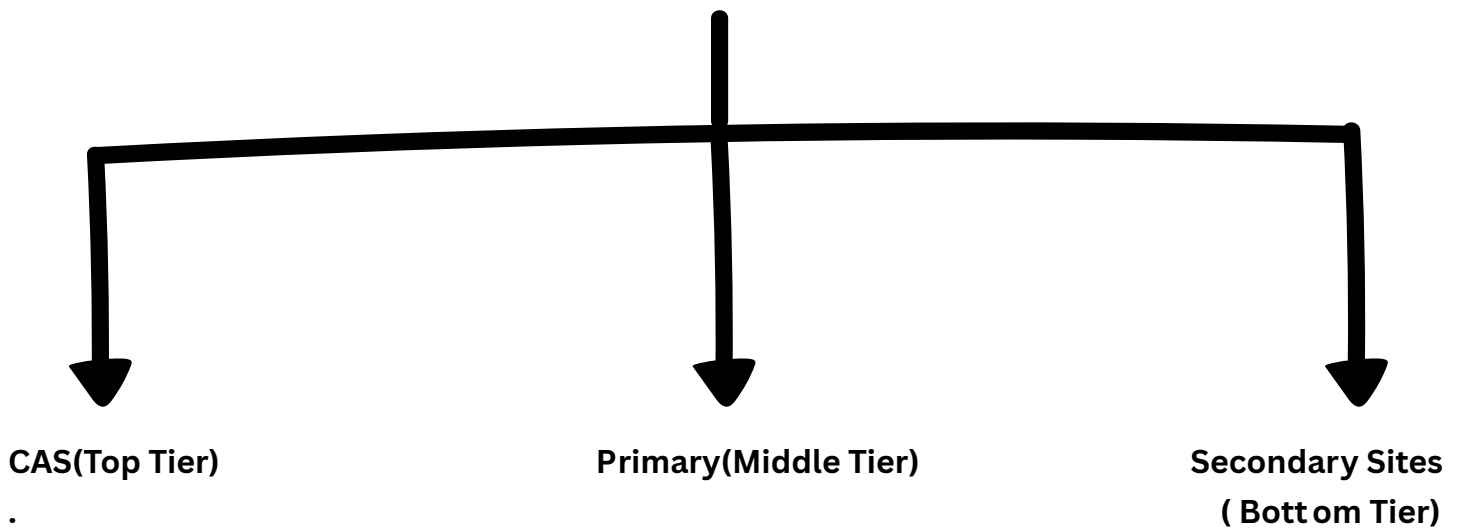
- Suitable for smaller, more localized environments.
- Can manage clients directly.
- Can later be expanded to include a CAS, at which point it becomes a child-primary site.
- **NOTE:** A stand-alone primary site and a child-primary site are technically the same; their designation depends on whether they are under a CAS or not.

Example: Stand-alone site

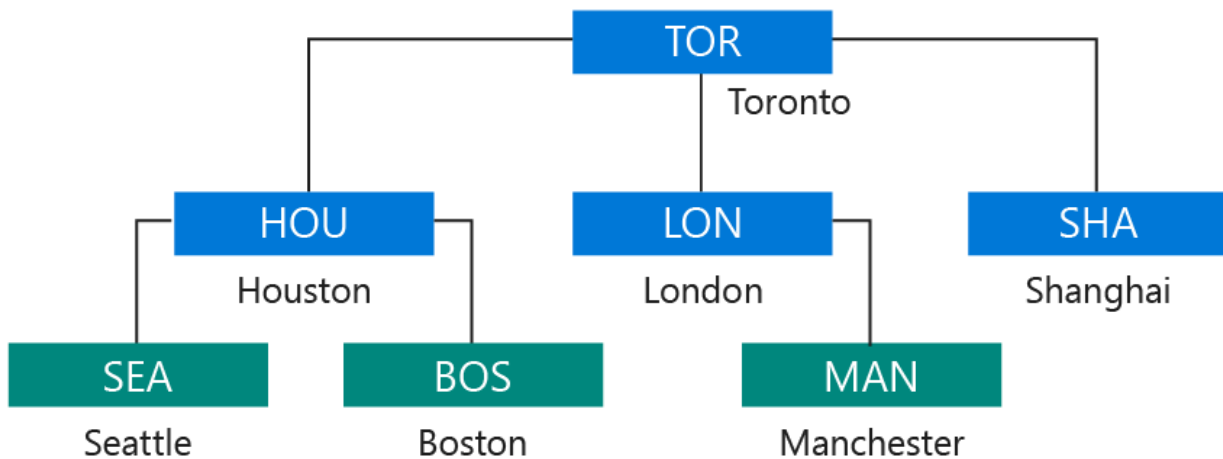
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Hierarchy Structure:



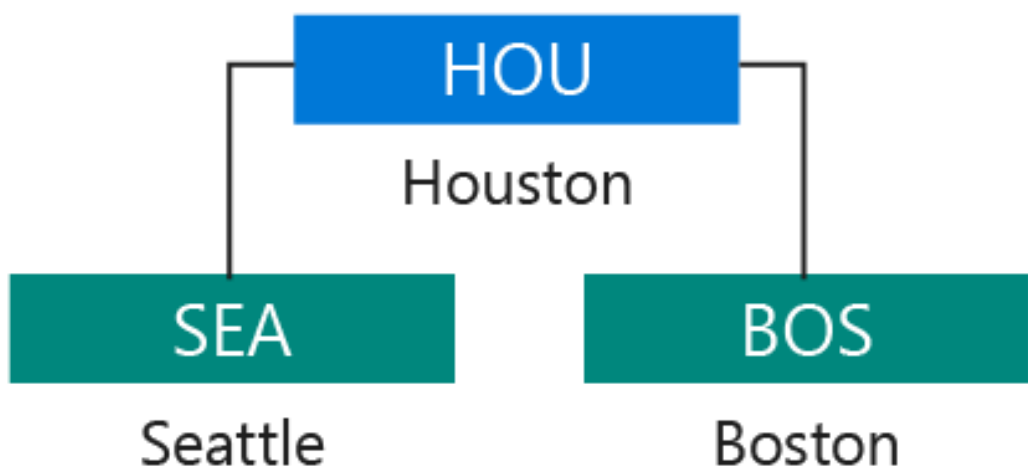
Example hierarchy: Central administration site
with primary sites and secondary sites



3. Secondary Sites

- Only installed below a primary site.
- Do not manage clients directly.
- Extend primary site functionality to remote locations with limited network bandwidth.
- Help compress and manage data traffic between clients and the site.

Example hierarchy: Primary site
with secondary sites



4. Site System Servers and Site System Roles

Each Configuration Manager site comes with specific server roles:

Default Roles:

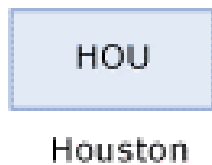
- *Site Server: The main system where the site is installed.*
- *Site Database Server: Hosts the SQL Server database.*

Optional Roles:

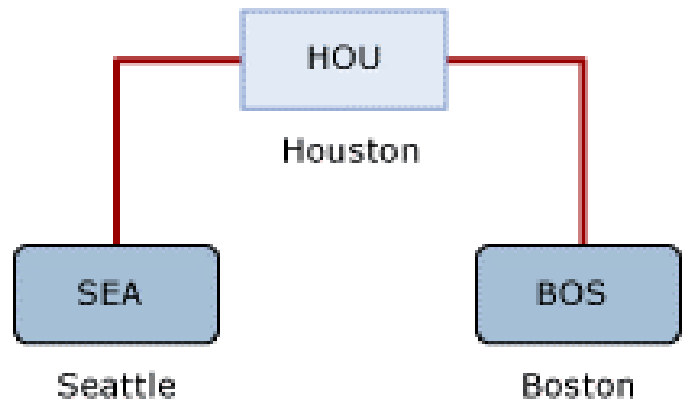
- *Only required when specific functionality is needed.*
- *Can be distributed across multiple servers for scalability and performance.*

Smaller Deployments:

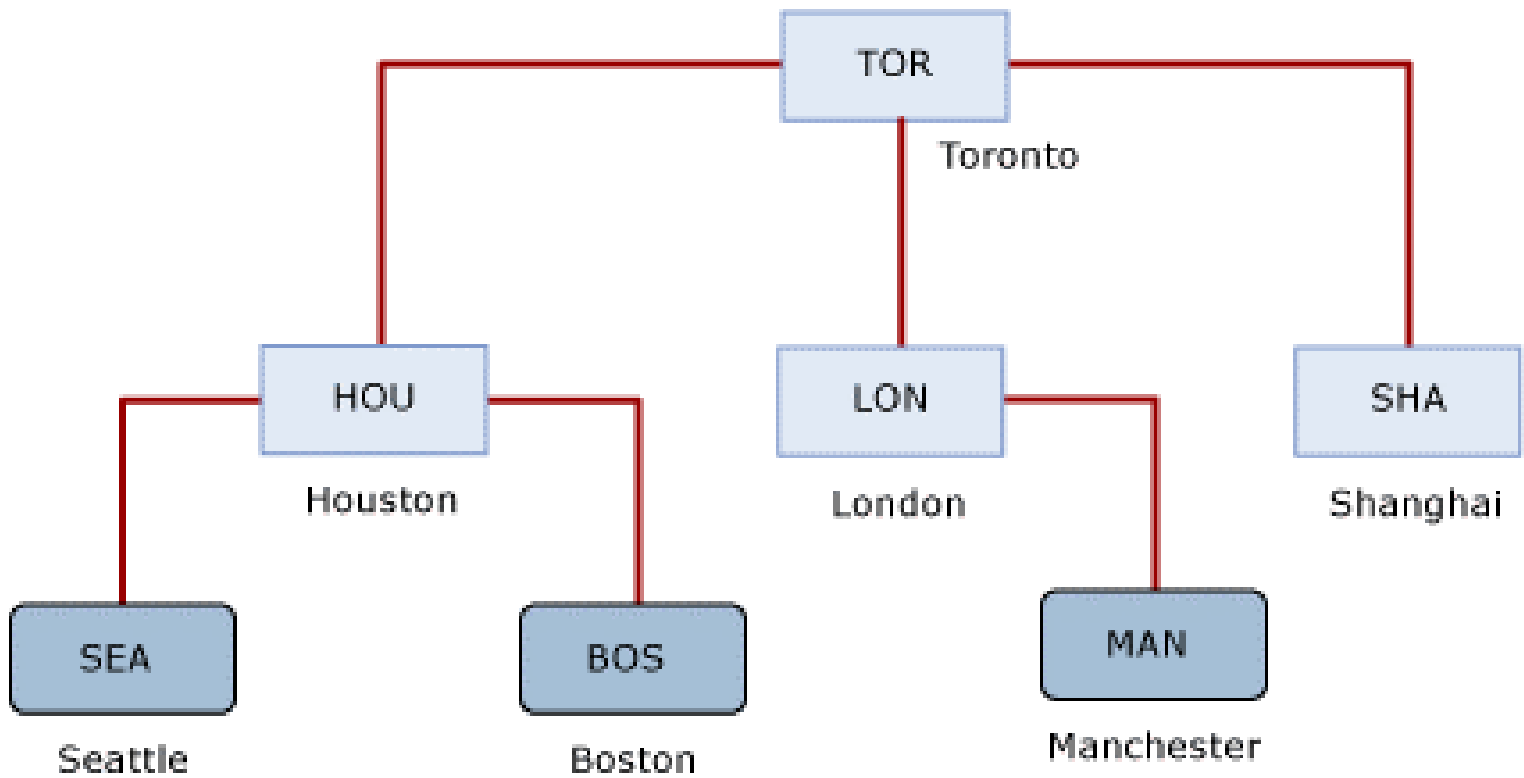
- *All roles may be hosted on a single server initially.*
- *Additional servers can be added as the environment grows.*



Example: Stand-alone site



Example hierarchy: Primary site with secondary sites



Example hierarchy: Central administration site with primary sites and secondary sites

5. Publishing Site Information to Active Directory Domain Services (AD DS)

- Schema extension enables Configuration Manager to publish important site info to AD DS.
- Simplifies management by allowing clients to find site data directly from Active Directory.

Steps to Enable Publishing:

- Extend the Active Directory schema (once per forest).
- Create a **System Management container** in each domain.
- Configure Configuration Manager to publish to this container.

Clients can then discover:

- Site information
- Available services
- Site system server locations

