

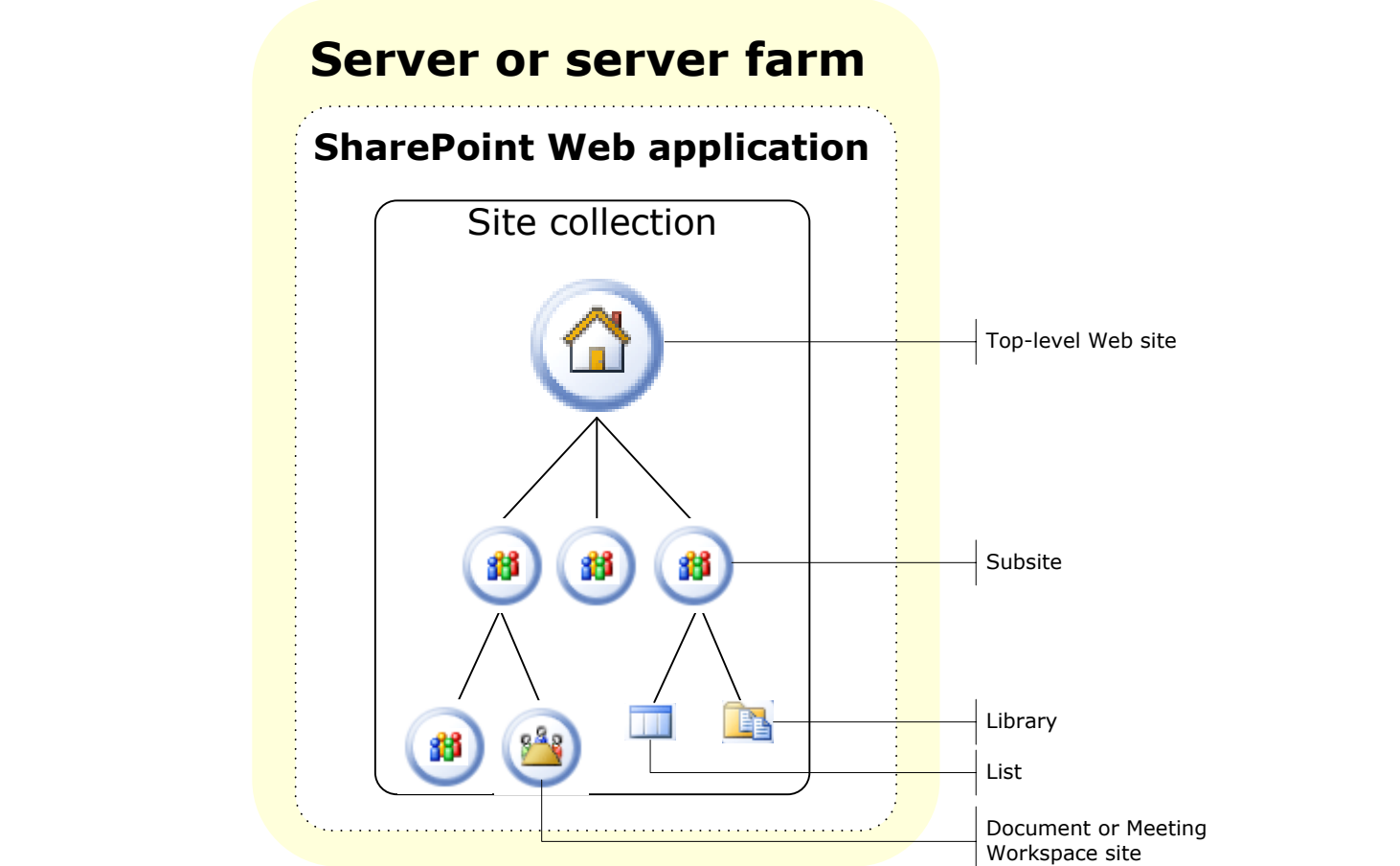
Model: SharePoint Products and Technologies Baseline Site Hierarchies

Basic Elements

- Microsoft® Office SharePoint® Server 2007 is based on **Windows® SharePoint® Services 3.0** site hierarchies.
- Site hierarchies may include the following container elements:
 - SharePoint Web application** — A load-balanced Internet Information Services (IIS) Web site extended with SharePoint Products and Technologies (formerly called a "virtual server" in SharePoint Products and Technologies 2003). Can contain multiple site collections (or multiple managed paths with multiple site collections).
 - Managed path** — (Optional) A logical container of site collections within a Web application. Allows administrators to group related site collections (useful for organizing URLs) and designate areas in an IIS Web site as not owned by SharePoint Products and Technologies.
 - Site collection** — A logical container of SharePoint sites. Contains one top-level Web site and possibly multiple subsites, workspaces, and others.

Windows SharePoint Services 3.0 elements

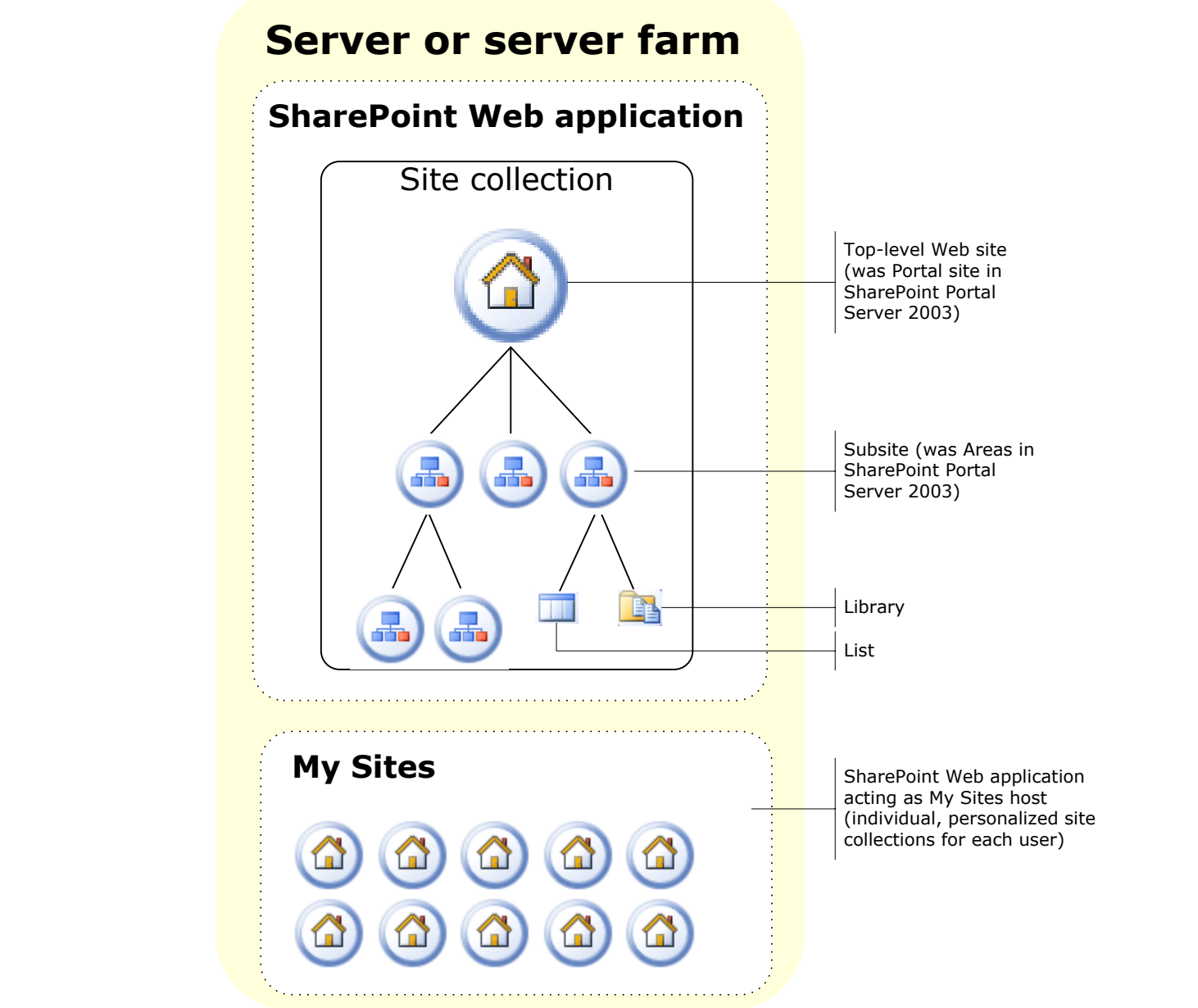
- Top-level Web site** — The initial site in a site collection (that is, the root site). Can have multiple subsites, workspaces, and others beneath.
- Subsites** — Subordinate sites to the top-level Web site. Can have multiple subsites, workspaces, and others beneath.
- Workspaces** — Special implementations of subsites designed for collaborating on documents (Document Workspace) or coordinating meetings (Meeting Workspace).
- Lists** — Basic elements of SharePoint sites. Examples: Task list and Announcements list.
- Document or picture libraries** — Basic elements of SharePoint sites. Lists built to contain documents or images.
- Web Part pages** — Pages that can contain Web Parts. The Home page of any site is a Web Part page.
- Web Parts** — Blocks that can contain data, code, views of lists, among others.



Additional Elements in Office SharePoint Server 2007

- Top-level Web site (was Portal site in SharePoint Portal Server 2003)** — The initial site in a site collection. Can contain multiple subsites. Includes global navigation for the site collection.
- Subsite (was Area in SharePoint Portal Server 2003)** — Subordinate to the top-level Web site. Subsites can contain lists and libraries, plus other subsites. Examples for Office SharePoint Server 2007 include: News, Site Directory, and Search Center.
- Dashboard** — A Web Part page with special Web Parts, such as business data Web Parts, Excel Web Access Web Parts, or KPIs that can be filtered to provide a unified but flexible view of data and content from several sources.
- Authoring site** — A site where users can author content. Content is then published to the staging and production sites.
- Staging site (optional)** — Office SharePoint Server 2007 pushes content to a staging site before it is published to the production (customer-facing) site.
- Production site** — Customer-facing Web site. Mirror of the staging site.
- Document Center** — Giant document library site.
- Records Center** — Specialized document library site for use in managed records environments.
- Data connection library** — Stores trusted data connections for business intelligence features.
- My Sites** — personal sites for users.
- Pages library** — library for storing Web Pages in a publishing site.

For more information about site types and templates available in Office SharePoint Server 2007, see **Site templates included in Office SharePoint Server 2007** in the Determine sites and subsites topic of the Planning Guide.

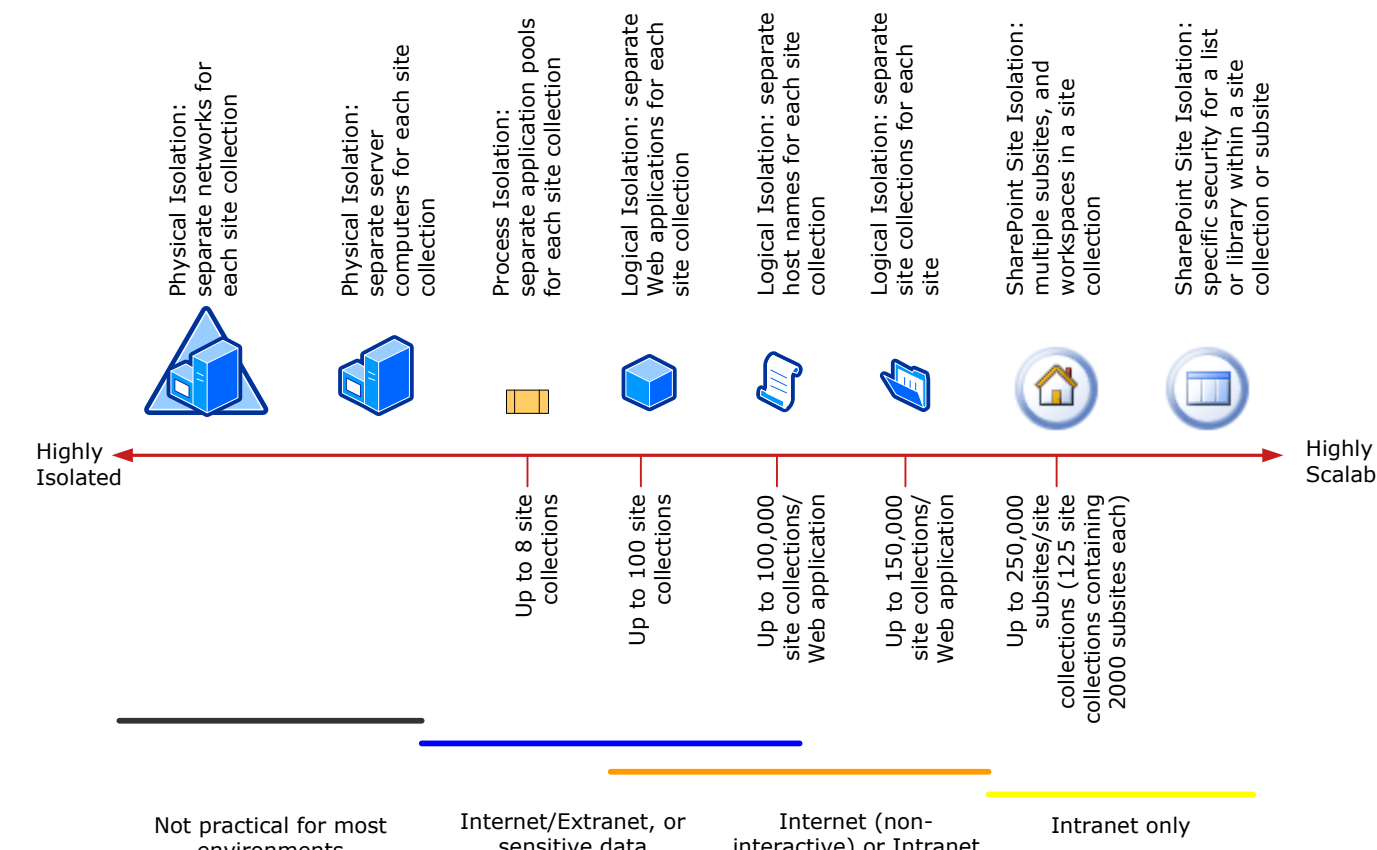


Design Principles: Isolation and Scalability

Isolation involves separating content or processes so that what happens in one area does not affect another. Isolation is not the same as security, but can contribute to security by separating areas in your environment.

Isolation and scalability at opposite ends of a scale:

- Physically isolated sites with separate networks for each site are **completely isolated**, but expensive and **not scalable**.



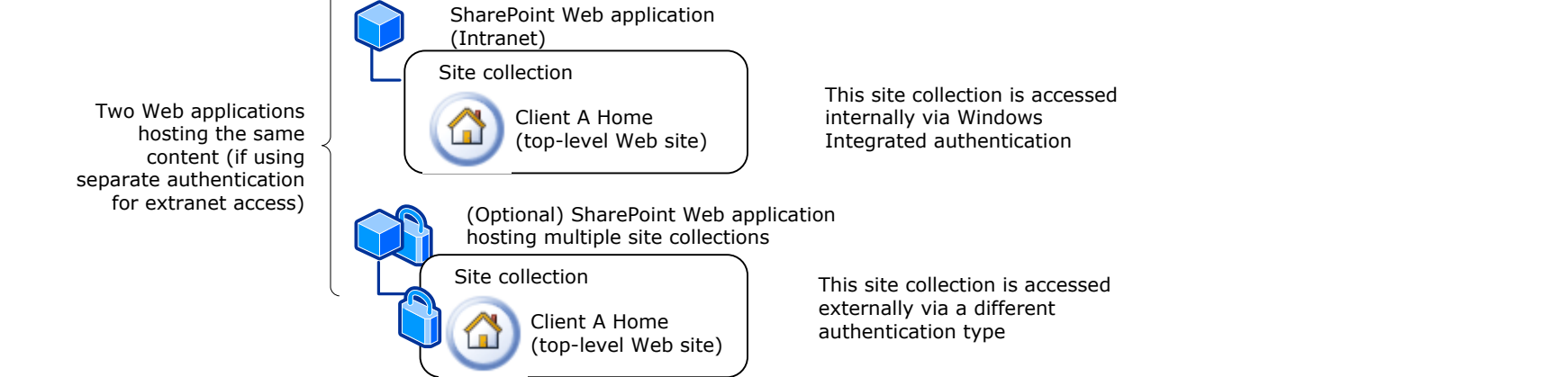
Windows SharePoint Services 3.0 and Office SharePoint Server 2007 are optimized for a large number of site collections.

You should also consider to what degree you need to isolate any custom code. For more information, see the MSDN Web site.

Shared/Staged Content Across Site Collections

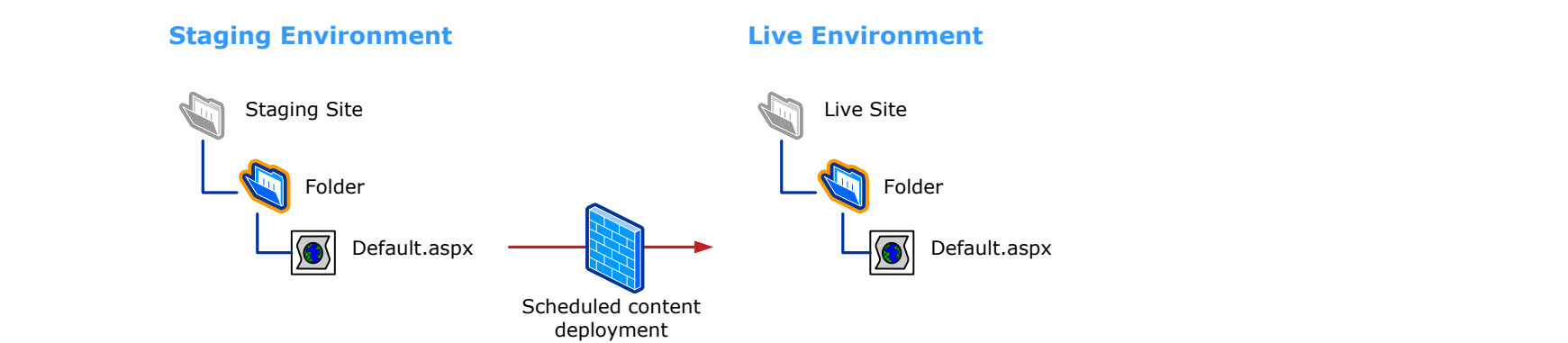
Multiple site collections may need to access the same content. This occurs in the following situations.

- When two authentication methods are used to access the same content (as in an Extranet/Intranet environment). This is mirrored content — **the same content is hosted by different SharePoint Web applications**, which point to the same content databases.



Note that in SharePoint Products and Technologies 2003 (pre-SP2), this was the only choice for extranet site hierarchies because the URLs had to be identical. With Windows SharePoint Services SP2 (and in Windows SharePoint Services 3.0 and Office SharePoint Server 2007), you can use **Alternate Access Mapping** to route requests from both HTTP and HTTPS protocols to the same SharePoint Web application. So this model is now only used if you must have separate authentication methods for the different environments.

- When content must be published before going to a live site. This is staged content — **content is published to a staging environment**, and then to the live site that customers can access. **See Also: Staging Model**



Note that in a publishing scenario, content may need to have the same metadata associated with it in both the staging and live environments. To do this, **the same template can be applied to the different sites**, which ensures that the same content types and workflows, among others, are available.

Design Principles: Site Collections vs. Subsites

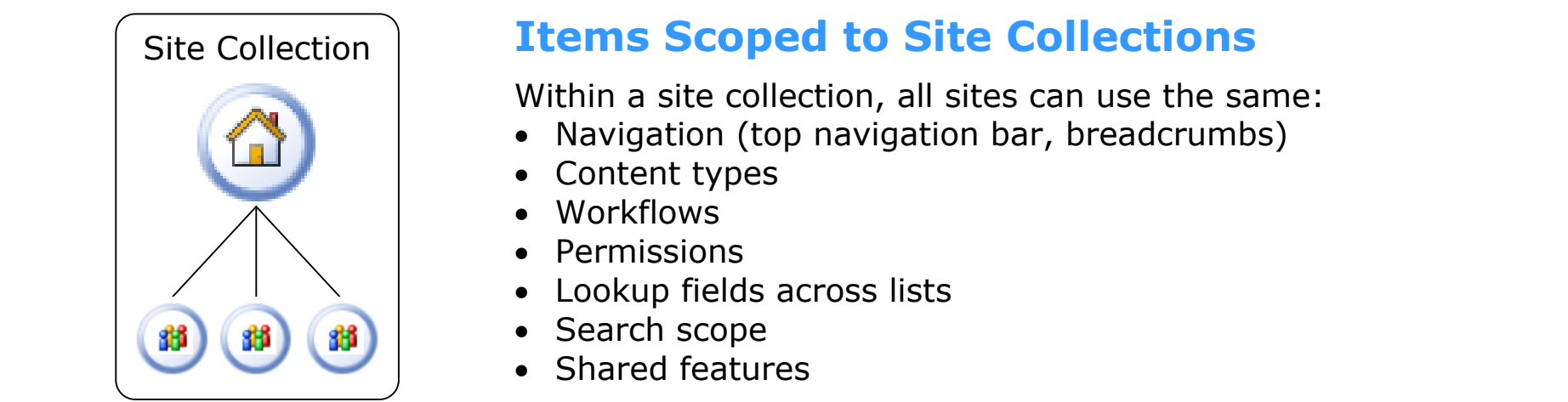
When you add a site to your environment, you can choose to add it as a subsite in an existing site collection or as top-level Web site in a new site collection.

Choose a subsite when you:

- Want to have **shared navigation, permissions, lists, or design elements** (such as themes or styles) between the new site and another site.
- Are adding content related to the existing **information architecture**.

Choose a new top-level Web site in a new site collection when you:

- Are creating a site with a **different purpose** than other site collections.
- Need **separate security**.
- May need to **move the site collection to a different database**.
- Want to be able to **back up or restore** just that site.
- Want to be able to **scope a workflow** to just that site.



TechNet Articles

These articles in the Microsoft TechNet library provide related information.

- Office SharePoint Server 2007**
- Design logical architecture
 - Logical architecture components
 - Plan for host-named site collections
 - Plan Web site structure and publishing
 - Plan for collaboration sites
 - Plan for software boundaries
- Windows® SharePoint Services 3.0**
- Design logical architecture
 - Determine sites and subsites needed
 - Logical architecture components
 - Plan for host-named site collections
 - Plan for software boundaries

Site Hierarchy Recommendations

Single Site Collection

Description
A single site collection is used to contain all content in the environment.

- Content and information are organized into subsites and lists or libraries.
- Permissions are set at the subsite, list, and item level.
- A standalone server or a single-server farm supports the environment.

Recommendations
This configuration works best in small environments or departments, where:

- You want to optimize for sharing elements across sites in the site collection, such as navigation, content types, and permissions.
- Your environment does not require strict process or content isolation.

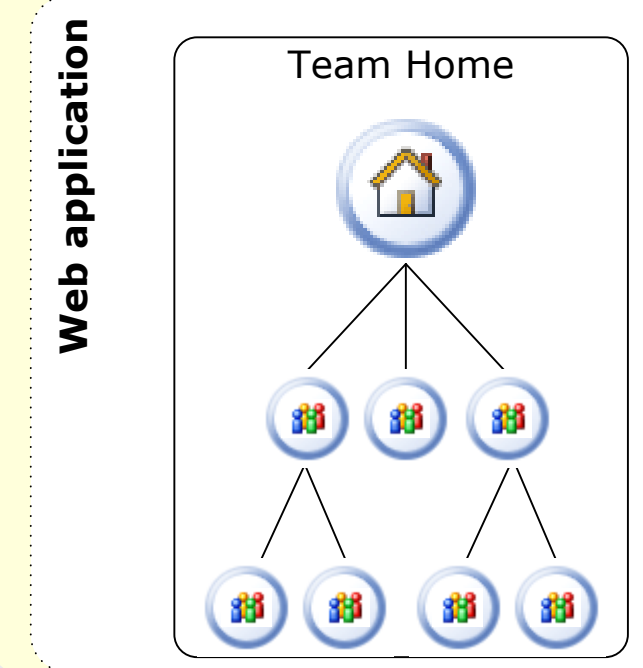
Numbers
A single site collection can contain up to 2,000 subsites.

Example
A departmental Web site.

Note This environment is not suitable for hosting My Sites.

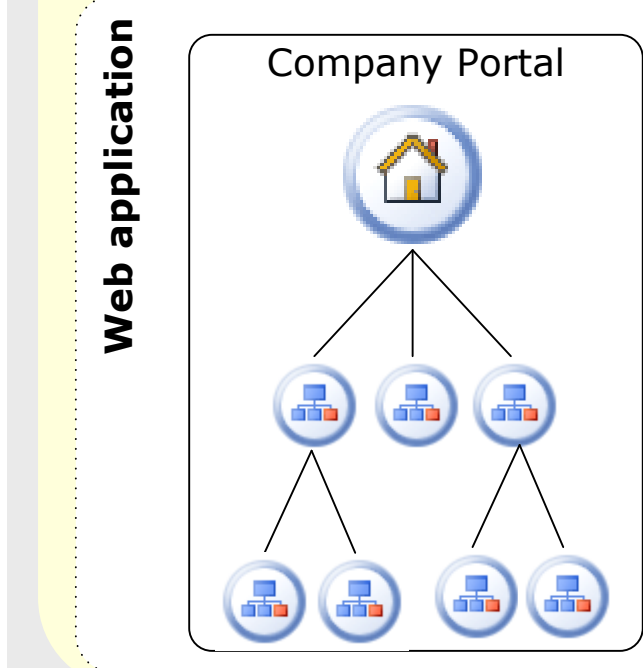
Windows SharePoint Services

Single Server



Office SharePoint Server 2007

Single Server



Multiple Site Collections, Single Web Application

Description
Multiple site collections are used to organize content.

- The site collections may be used by overlapping sets of users but do not share content or permissions.
- A standalone server or a single-server farm is supporting the environment.
- Host names can be used to give unique URLs to each site collection

Recommendations
This configuration is recommended for the following scenarios:

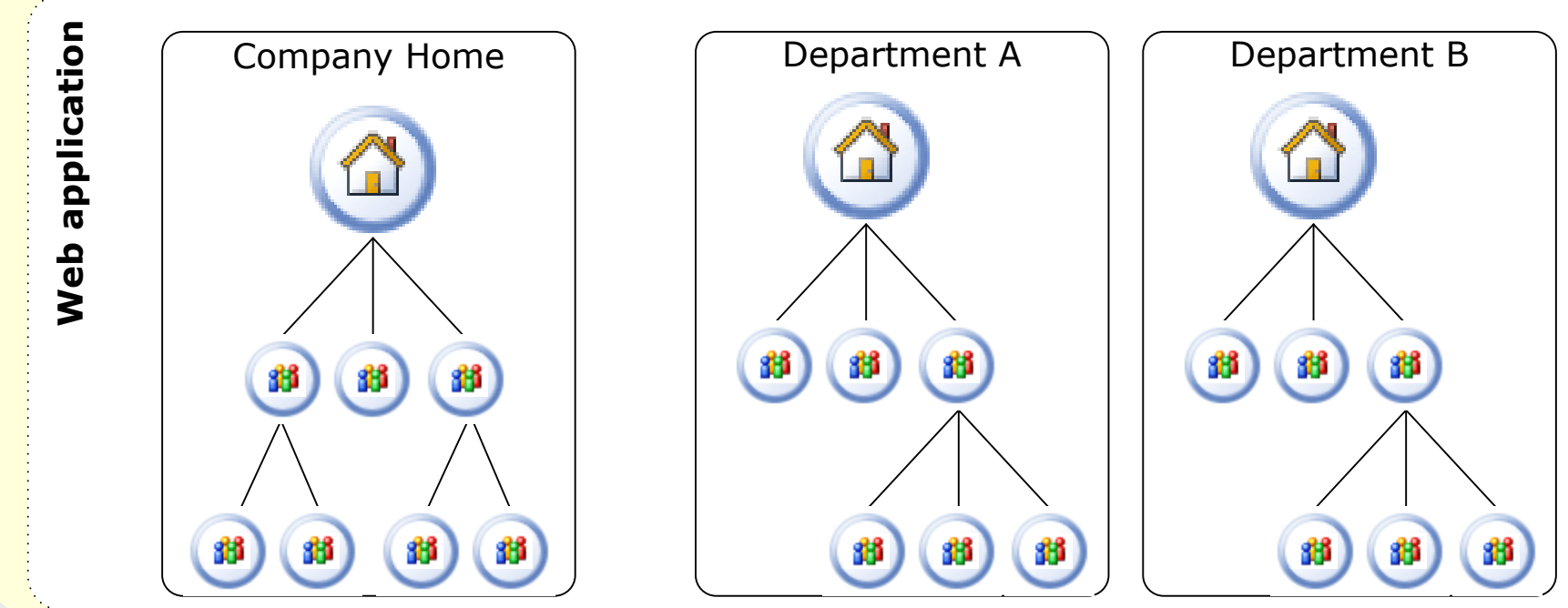
- You want different groups or departments to have their own URLs or host names.
- You want each site collection to have unique navigation, content types, master pages, or permissions.

Numbers
A single Web application can support up to 125 site collections with up to 2000 subsites each (250,000 sites total).

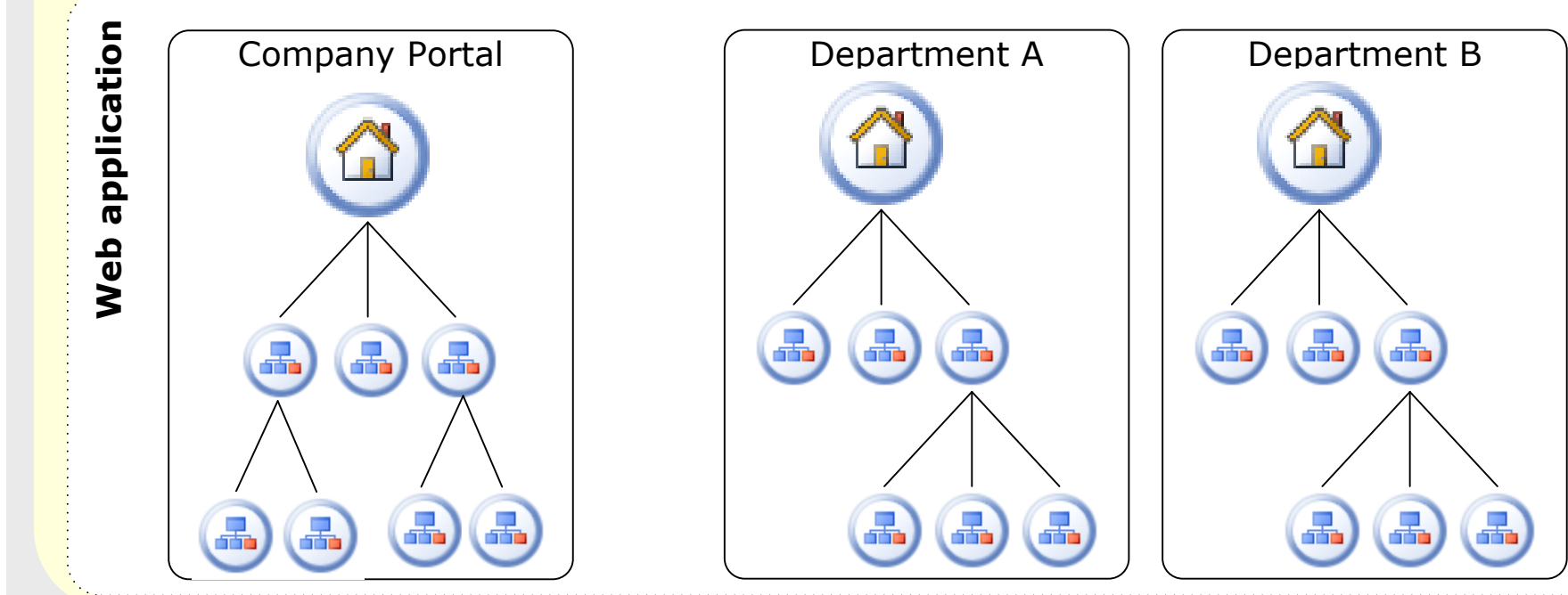
Example
Departments in a small or medium-sized organization.

Note This environment is not suitable for hosting My Sites.

Single Server or Farm



Single Server or Farm



Multiple Web Applications, Single Farm

Description
Multiple Web applications are used to isolate processes within a single farm, so that if one process stops, others are not affected.

- Sites are divided into Web applications by purpose or type (within a single organization) for performance reasons.
- Or, sites are divided into Web applications by department or company, for security reasons.
- Multiple authentication methods are supported — one per Web application.

Recommendations
This configuration is recommended for the following scenarios:

- Hosting sites for multiple companies or multiple independent departments within a single organization.
- Providing flexibility for each company or department to further isolate content or optimize performance by using multiple Web applications or application pools.
- Providing for multiple authentication types within a farm.
- Hosting My Sites.

Numbers
A single farm supports:

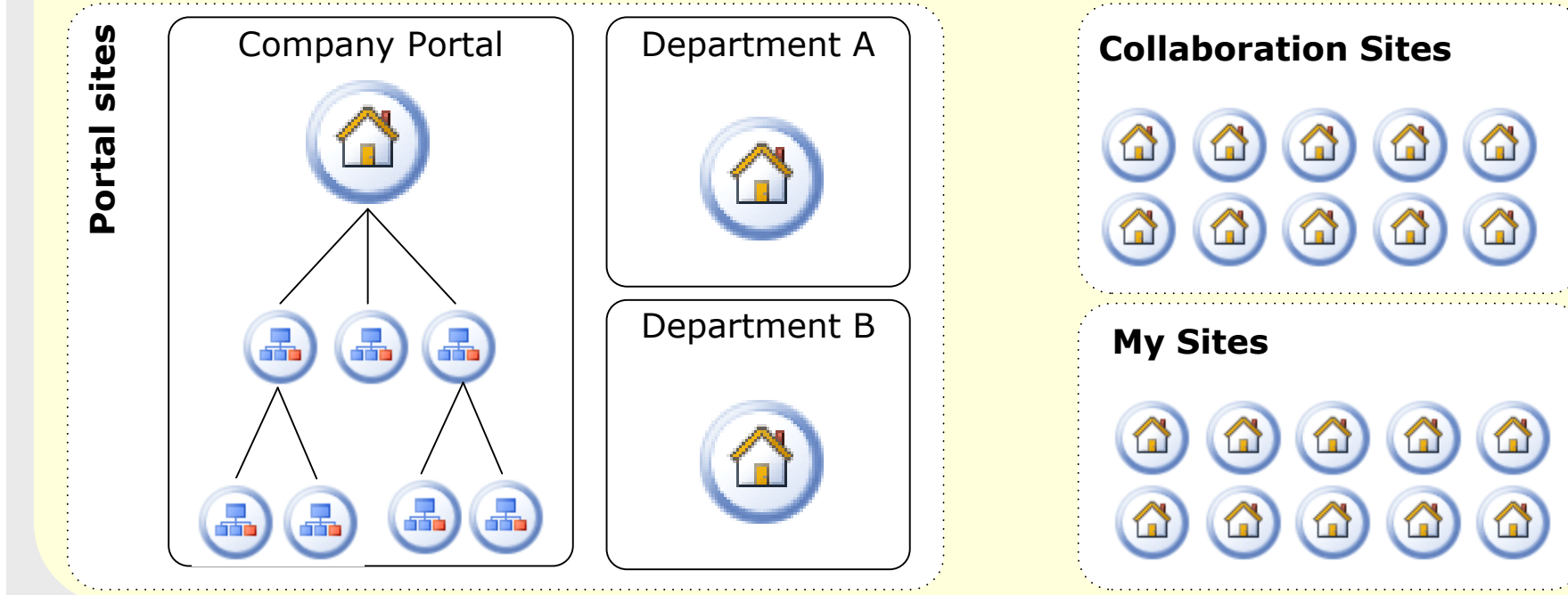
- Up to 20 Shared Services Providers
- Up to 8 application pools per farm
- Up to 100 Web applications per farm or application pools
- Up to 2 million sites/domain

Example
Internal or external hosting.

Farm



Farm



Multiple Server Farms

Description
Multiple farms are used to provide physical isolation between organizations (companies or departments for hosting scenarios), or environments (internal or externally accessible):

- Each organization or environment resides on a dedicated farm.
- Each farm is completely isolated, resulting in no possibility of cross-farm data access.

Recommendations
This configuration is recommended for the following scenarios:

- Isolating departments within a single organization where physical isolation is a requirement.
- Publishing from an internal site to an Internet site.
- Hosting SharePoint sites for multiple companies where physical isolation is necessary for:
 - Tracking resource utilization
 - Securing applications and data
 - Optimizing performance
 - Satisfying licensing requirements

Numbers
A single farm supports:

- Up to 20 Shared Services Providers
- Up to 8 application pools per farm
- Up to 100 Web applications per farm or application pools
- Up to 2 million sites/domain

Example
Geographically-distributed environments.

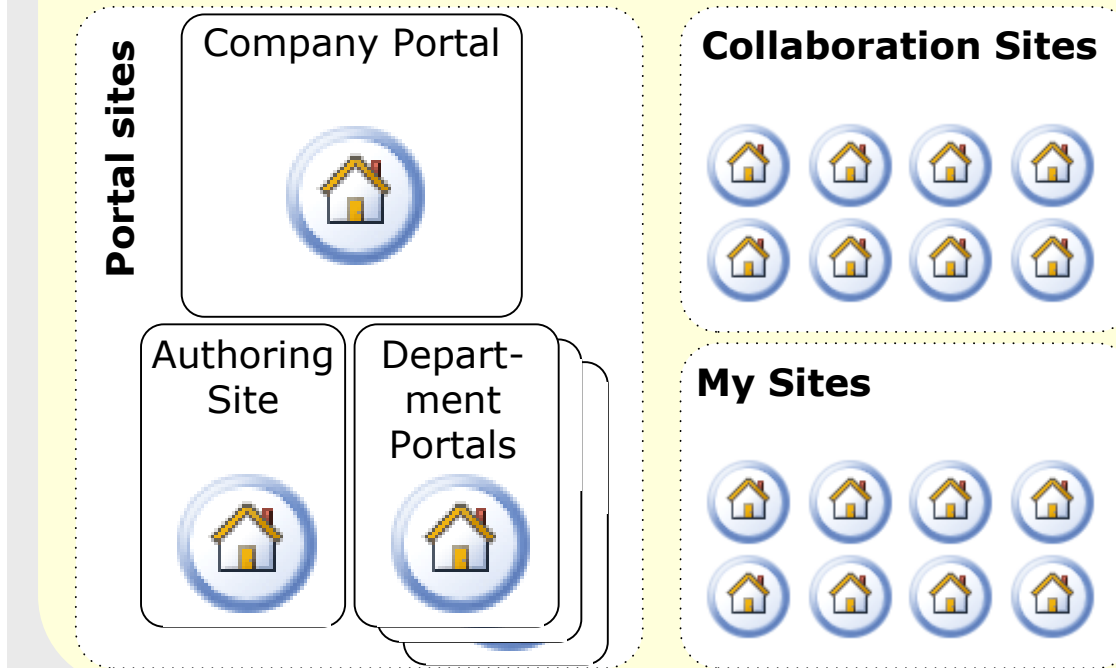
Farm 1



Farm 2



Farm 1



Farm 2

