

# Cross-farm Services in SharePoint 2010 Products

## Cross-farm services

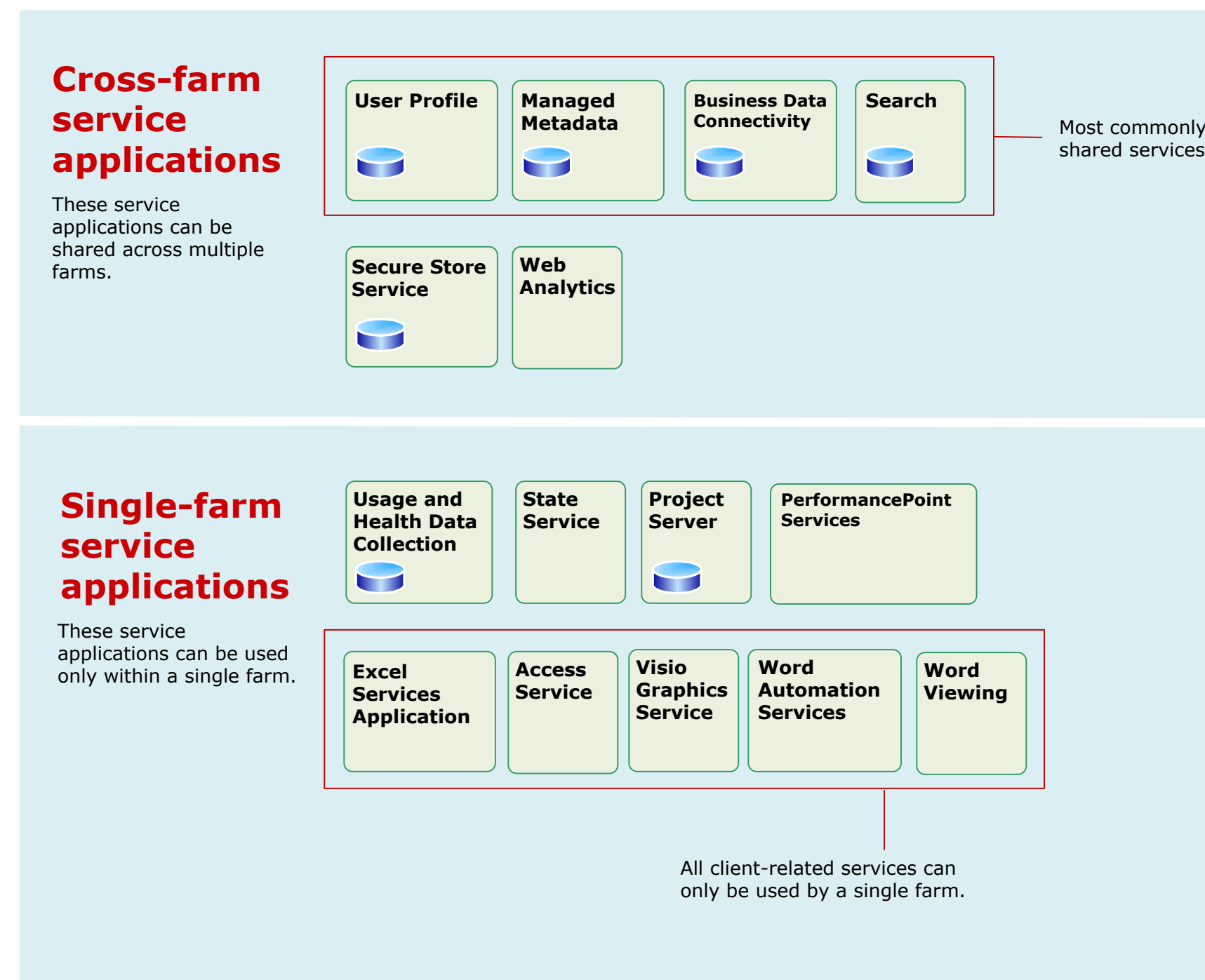
In Microsoft® SharePoint® Server 2010, services can be shared across farms.

### Sharing services across farms

- Some services can be shared across server farms. Other services can be shared only within a single server farm. Services that support sharing across farms can be run in a central farm and consumed from regional locations.
- Each Web application can be configured to use services from different farms. For example, you can share the User Profile Service across Web applications in several server farms while using some services, such as the Business Data Connectivity, locally.
- In large environments, computing-intensive services can be run in a central farm to minimize administration overhead and to scale out easily and efficiently as requirements grow. See the "Enterprise Services Farm example illustrated below.

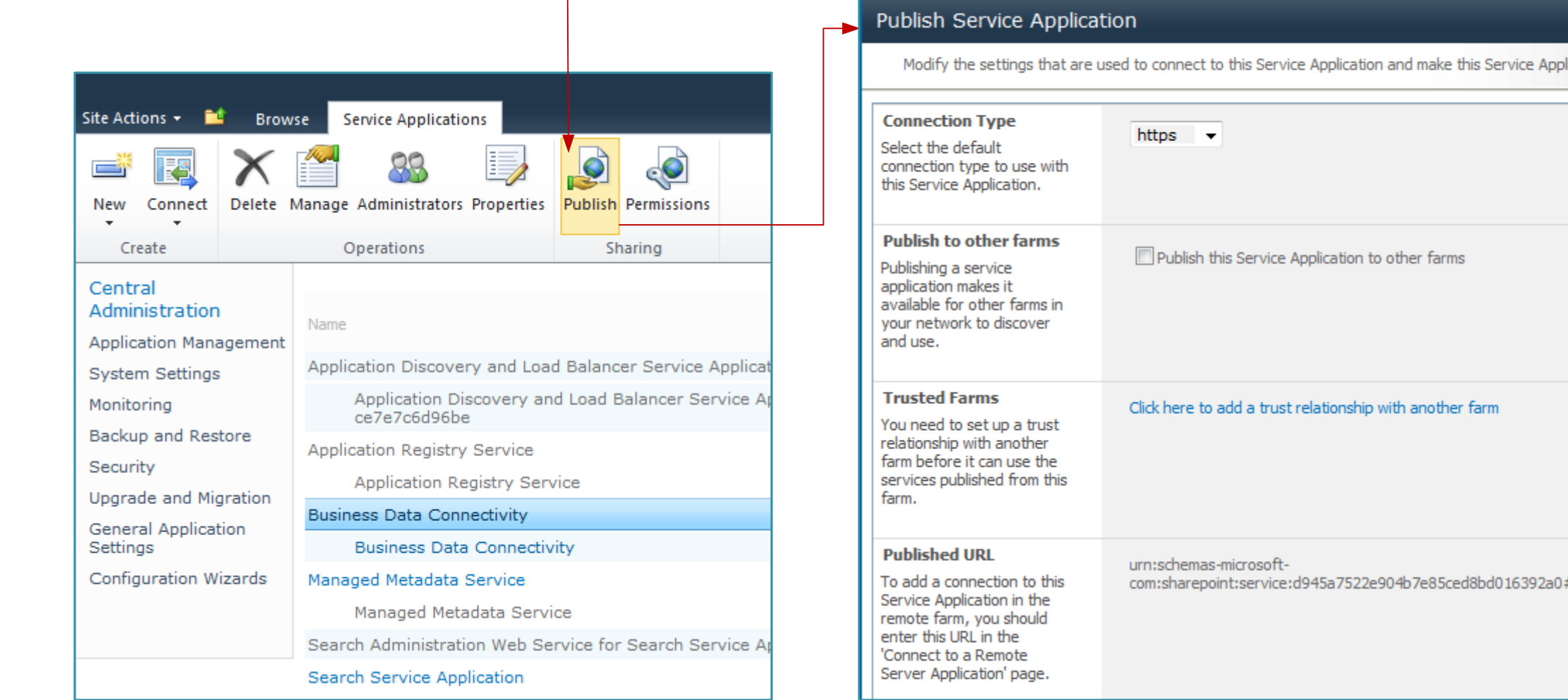
### WAN-friendly services

- Some services are optimized in SharePoint Server 2010 to perform better over the wide area network (WAN).
- Communications for service applications take place over HTTP(S). Service applications do not directly access databases across farms.
- Most new services are built on Windows Communications Framework. They have optimization built into their protocol using binary streams instead of XML for data transfer. Test results show improvements in network throughput with this change.

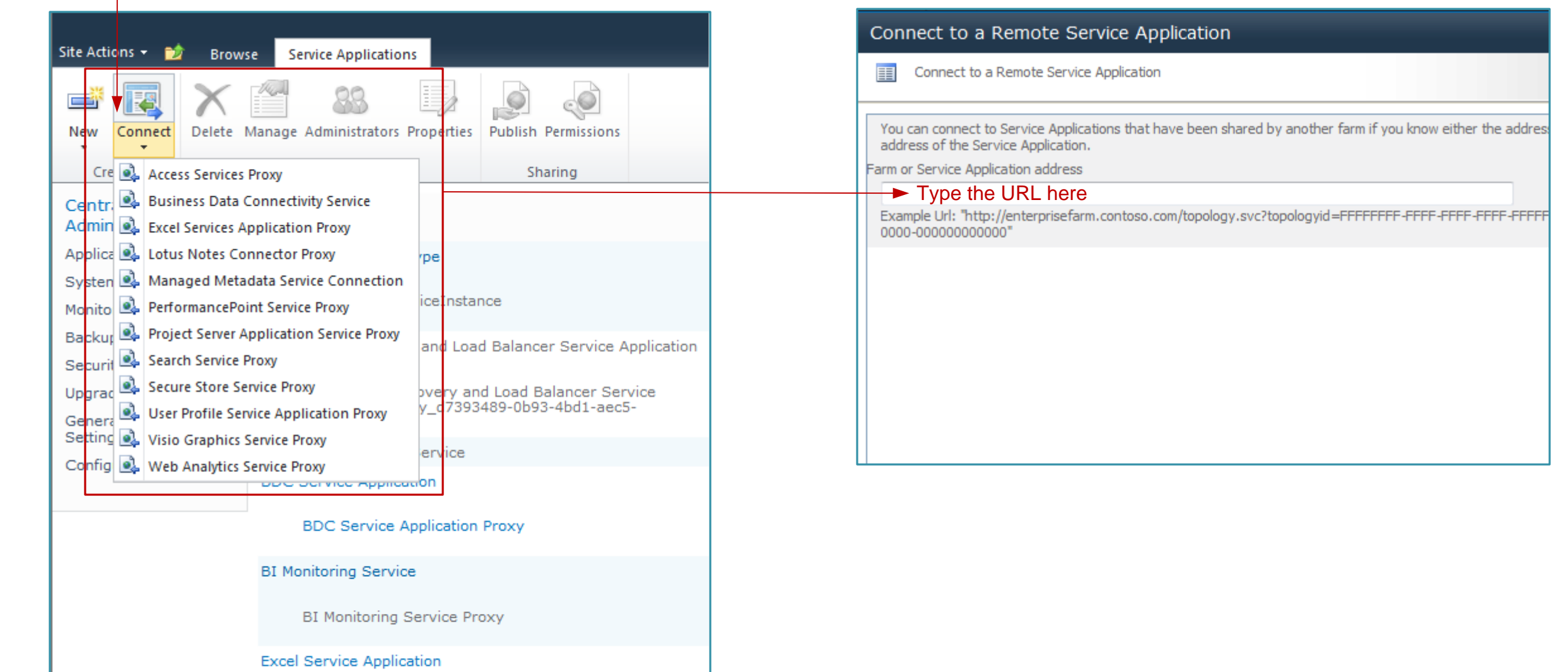


## Deploying services across farms

- Configure trusted farms**  
First, ensure that farms have exchanged certificates to trust each other.
- Publish service applications**  
To share a service application across farms, you first publish the service. This creates a URL for the service application.



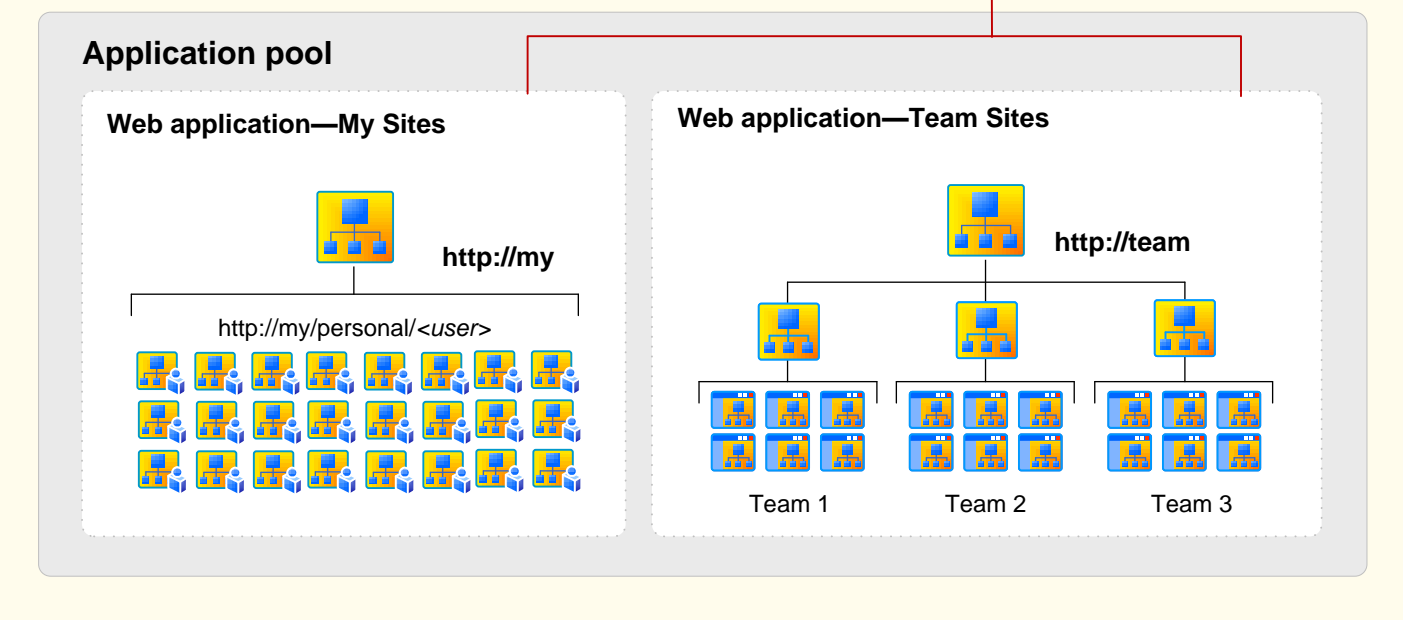
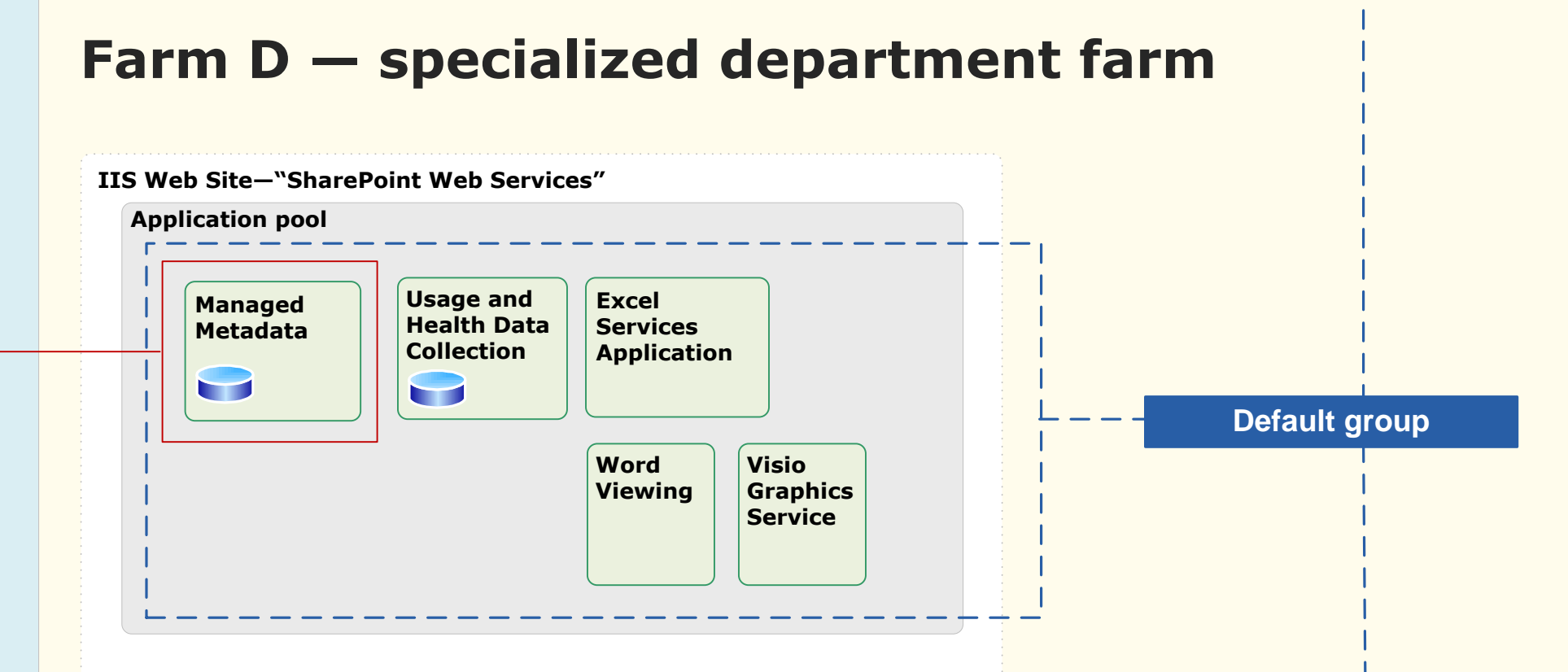
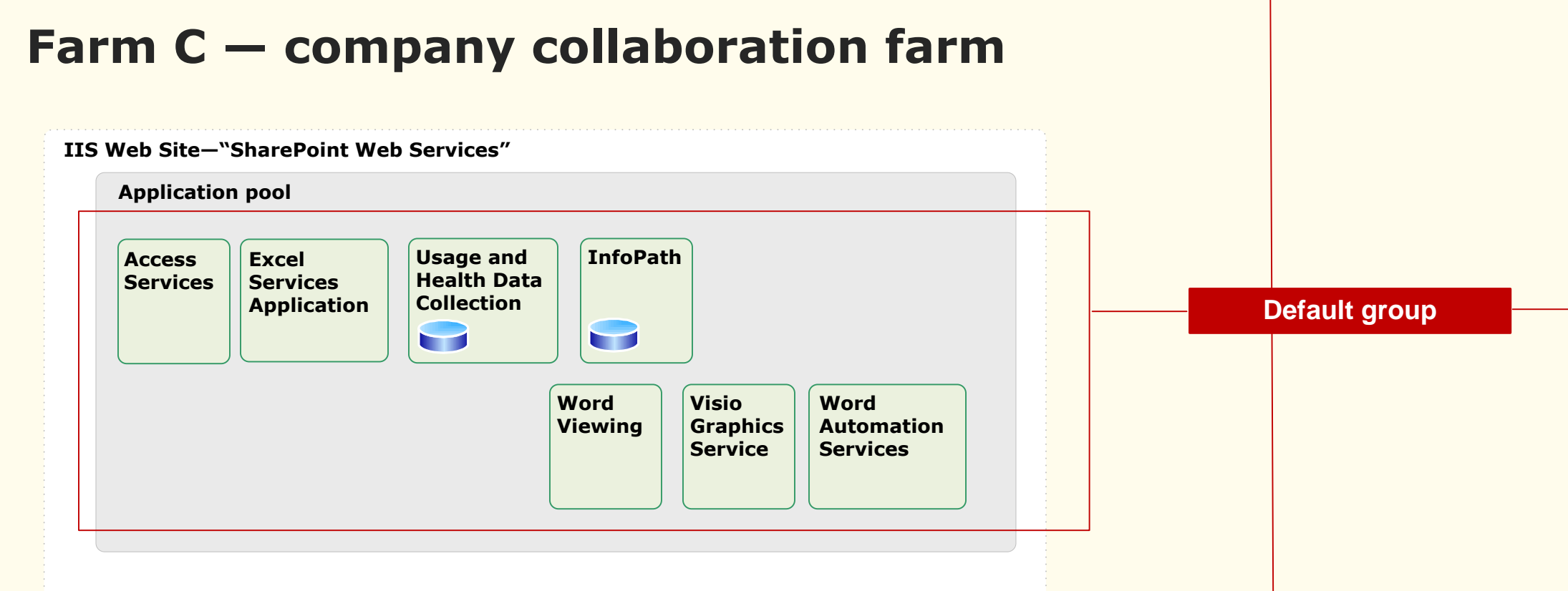
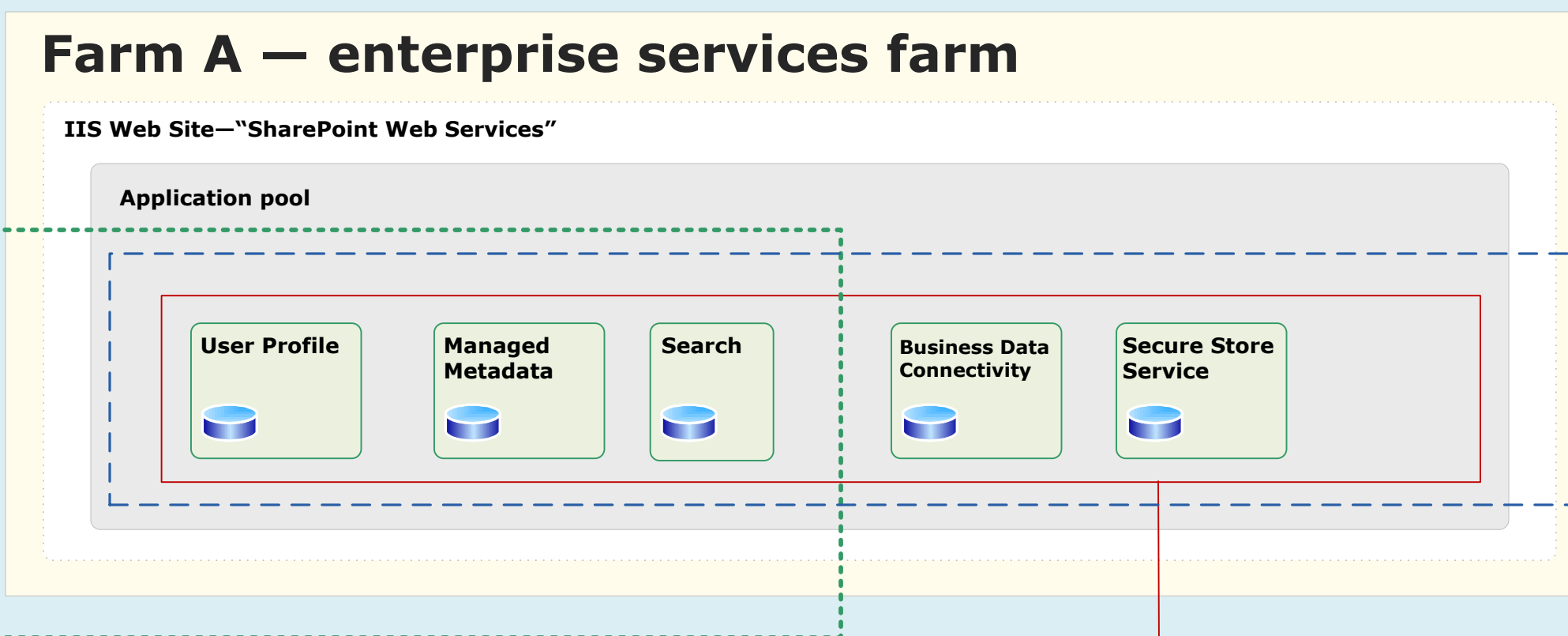
- Connecting to cross-farm services**  
To consume a service that is published by a remote farm, create a connection to the service by clicking **Connect** and then choosing which type of service you are connecting to. This prompts you to enter the URL of a published service. A proxy on the local farm is created to connect to the service on the remote farm.



## Architecture examples

### Enterprise services farm

An enterprise services farm is a server farm that is dedicated to hosting services for an organization. This diagram illustrates an enterprise services farm that hosts the most commonly deployed cross-farm services. It also illustrates several common types of farms that consume services from an enterprise services farm.



### Collaboration farm — mix of local and remote services

- Description**
- Cross-farm services are consumed from an enterprise services farm (Farm A).
  - This farm also consumes the Managed Metadata Service from a specialized department farm (Farm D) to integrate with this department's autonomously managed taxonomy, social tagging, and other features. If there are multiple instances of this service, one of the instances must be designated as the primary service which hosts the corporate taxonomy. All other instances of this service are then secondary instances, providing additional data to the primary data. Unlike other cross-farm services, Web parts by default include data from multiple instances of the Managed Metadata Service.
  - All other services are hosted locally (Farm C).
- Recommendations**
- This is the recommended configuration for companies that host multiple farms to meet business needs.
- Use this configuration:
- To optimize administrative and farm resources at the enterprise level for hosting services (Farm A).
  - To optimize resources at the farm level for hosting collaboration sites.
  - To integrate with organization-wide profiles, metadata, search, and other centrally managed resources.
  - To integrate with metadata produced by a specialized team or department (Farm D).

### Deployment of services for a specialized department farm

- Description**
- Some teams within an organization might require a separate deployment of specific services to:
- Ensure data isolation (such as Business Data Connectivity data).
  - To provide the ability to autonomously manage services (such as Managed Metadata).
- This farm:**
- Consumes centrally-managed services, including Managed Metadata.
  - Also includes its own instance of the Managed Metadata Service in order to autonomously manage metadata for this team. By sharing this instance, the rest of the organization can integrate with this metadata.
- Recommendations**
- Use this configuration to:
- Allow a specialized team or department to manage metadata on their own.
  - Ensure that specific service data is isolated and managed separately from the rest of the organization.

### Specialized-service farms

Consider deploying specialized-service farms to optimize farm resources for specific services. This allows you to scale out the server farm and to scale up the hardware to optimize performance for a specific service.

- Search farm
- All other services

### Cross-organization farms

Services can be shared across any farm, not just enterprise services farms. Consider sharing services across farms in the following scenarios.

To provide enterprise-wide services without a dedicated enterprise services farm.

#### Primary corporate collaboration farm

- User Profile
- Search
- Business Data Connectivity
- Managed Metadata
- Secure Store Service

- Excel Services Application
- Usage and Health Data Collection
- Word Automation Services
- Visio Graphics Service

#### Department farm

Cross-farm services

- Usage and Health Data Collection
- Word Automation Services
- Visio Graphics Service

To share resources across farms and to avoid deploying redundant services.

#### Department farm A

- User Profile
- Search

Cross-farm services

- Excel Services Application
- Usage and Health Data Collection
- Word Automation Services
- Visio Graphics Service

#### Department farm B

Cross-farm services

- Business Data Connectivity
- Managed Metadata
- Secure Store Service

- Usage and Health Data Collection
- Word Automation Services
- Visio Graphics Service