# Module 1: Get started with Dynamics 365 Commerce

## A. Group discussion: Choose the right in-store topology

**Why learn this**? This activity highlights the differences between the in-store components and how to determine the best fit for an implementation. Considering the impacts of connectivity & offline redundancy, configuration & deployment, and ongoing maintenance.

**Scenario**: In this activity you will discuss:

• The differences between Microsoft-managed and Self-hosted Commerce scale units

• Comparison of Modern POS, Cloud POS and Store Commerce applications

• How to choose the right topology

**Time to complete**: 30 minutes

**Prerequisites**: Module 1 Lesson 3

**Objectives**: The student will have demonstrated how to evaluate real scenarios and consider the applicable and relevant information to make an informed decision on in-store topology. They will also learn that sometimes there are multiple valid options and additional information may need to be requested to make a final decision.

### Exercises

For this activity, you will work in small groups or individually. You will initially be given additional information on how to determine the correct in store topology to deploy based on the environment and requirements. Following this, several scenarios will be presented where you should work as a group to agree on the correct in store topology for the given scenario.

Dynamics 365 Commerce has several deployable components which can be deployed to meet the different needs of retail stores. You should consider the following factors:

* In store connectivity – How reliable and performant is the network within the store itself? Devices in the same store need to be able to communicate with each other.
* Internet connectivity – How reliable and performant is the store connection to the internet?
* Hardware / peripheral device requirements – Which devices are required? Are the devices dedicated to a single POS device or shared across multiple devices?

It is important to note that a one-size fits all approach may not be suitable for an organization. Store and internet connectivity can often vary greatly in different locations. It may be advisable to use different in store topologies for different stores.

The diagram below demonstrates the different topologies available and where they are best suited:

A picture containing graphical user interface

Description automatically generated

For the original image, see <https://docs.microsoft.com/en-us/dynamics365/retail/dev-itpro/media/channel/instore/topology.jpg> located on Microsoft Docs here: [Select an in-store topology - Commerce | Dynamics 365 | Microsoft Docs](https://docs.microsoft.com/en-us/dynamics365/commerce/dev-itpro/retail-in-store-topology)

In the following exercises you will be given a scenario. You will be provided with the information required to decide on the in-store topology to choose. For each scenario you must select:

1. Whether to use a Cloud commerce scale unit or a self-hosted commerce scale unit.
2. Which POS application and configuration is best; Modern POS (with offline support), Modern POS (without offline support) or Cloud POS.
3. Whether dedicated hardware, shared hardware station(s), or no hardware will be used.

Note that in some scenarios mixed deployments may be recommended.

### Exercise 1 – Fabrikam Inc.

Fabrikam Inc. is a fashion retailer in the USA. They operate a chain of 300 stores, primarily located in malls or outlet locations. Fabrikam has recently upgraded the internal networks in all stores, and each store has both a reliable cable internet connection, and a 4G backup in place, providing 99.998% internet availability. However, in the rare event the internet connection does go down, there must be redundancy so the store can still take sales. There are no fixed cash-desks in the stores, instead each store associate has access to a windows tablet device. There are several locations in the store where a printer, cash drawer and payment device are available, which any tablet device can connect to, to complete a customer sale.

Which in store topology would you recommend for Fabrikam? Why?

1. Commerce scale unit:
2. POS Application:
3. Hardware:

### Exercise 2 – Tailspin Toys

Tailspin toys are specialists in scale model toys. They stock model cars, trains, and airplanes in their 20 stores across the pacific north-west. The stores are often located in unusual spots, and most have average internet connectivity. Outages are common but are normally resolved very quickly. The in-store networks are old and can be unreliable. It is important the stores can continue to take sales when connectivity is unavailable. Tailspin Toys is a small company with only four members of staff in the IT department. Where possible they need to limit any monitoring or maintenance overheads. Each store has two cash-desks. Each POS terminal has a thermal printer, cash desk, payment device, and customer facing display attached to it.

Which in store topology should you recommend for Tailspin Toys? Why?

1. Commerce scale unit:
2. POS Application:
3. Hardware:

### Exercise 3 – Alpine Ski House

Alpine Ski House manufacture and sell winter sports equipment, including custom designed Ski’s. Alpine Ski House has no permanently placed stores, however they often open pop-up shops at competition events and select local Ski resorts during the season. Depending on the location, they will rent an internet connection from the landlord or event holder or will utilize 4G connections. If 4G is not available, they will deploy a satellite connection instead. As a result, they ensure they always have an internet connection available. Alpine has a team of sales associates which often switch between locations at short notice. Each sales associate has a Microsoft surface Pro and a stand-alone payment device, which is not connected to the POS application. No other devices are required, as customers are emailed receipts for their purchase. Alpine would prefer to reduce the amount of equipment the sales associates must carry with them where possible. As the surface devices are often shutdown between sales events, it is difficult to schedule system maintenance, any solution to combat this would make the operation run much more smoothly.

Which in store topology would you recommend for Alpine Ski House? Why?

1. Commerce scale unit:
2. POS Application:
3. Hardware:

### Exercise 4 – Southridge Video

Southridge Video are a nationwide electronics reseller. They stock TV’s, PC’s & laptops, and games consoles. Southridge has over 1,000 locations. The locations can be split into three categories:

1. High street stores – These stores are smaller, with two or three fixed cash desks each. Each POS Terminal has its own cash drawer, printer, and payment terminal. Store internet connectivity performance varies across the day with a notable drop in performance after 6pm on weekdays, and across the weekend, however it rarely goes completely offline.
2. Super stores – These stores are much larger, located in retail parks. There is a mix of fixed cash desks, each with its own hardware devices and Windows tablet devices with payment stations located throughout the store, which any tablet device can connect to. The store has a high volume of sales, and transactions are often suspended and recalled between different POS terminals. The internal network within the store is extremely stable and reliable. However, internet connectivity often drops out completely for hours at a time.
3. Shop-in-shop stores – These stores are located within another retailer’s premises; a well-known department store. The shops are managed and staffed by Southridge. The internet connectivity is very reliable, and as sales volumes are low, if it does ever go offline, the store can use a Microsoft Excel to track sales and print a customer receipt. Each store has between three and five cash desks. Each POS terminal has its own dedicated printer, cash drawer and payment device.

Which topology should you recommend for Southridge Video store type? Why?

High street stores:

1. Commerce scale unit:
2. POS Application:
3. Hardware:

Super stores:

1. Commerce scale unit:
2. POS Application:
3. Hardware:

Shop in shop stores:

1. Commerce scale unit:
2. POS Application:
3. Hardware: