

## Image Sources

- Images can be platform-independent (e.g. backgrounds) and can be downloaded using a URI or embedded in the PCL (to ship with the app).
- Or, they can be platform-specific (e.g. icons). They should be added to each application project.
- `Image.Source` is of type `ImageSource`, which is an abstract class. Its derivatives are **`UriImageSource`**, **`ResourceImageSource`** and **`FileImageSource`**.

## Downloading Images

### In XAML

Caching is enabled by default.

```
<Image Source="http://..." />
```

### In Code

Useful for disabling caching or overriding validity period.

```
image.Source = new UriImageSource  
{  
    Uri = new Uri("http://..."),  
    CachingEnabled = false,  
    CacheValidity = TimeSpan.FromHours(1)  
};
```

## Embedding Images

Add to PCL and set the Build Action to **EmbeddedResource**.

### In Code

```
image.Source = ImageSource.FromResource("...resourceId...");
```

### In XAML

Create a custom markup extension:

```
public class EmbeddedImage : IMarkupExtension { ... }
```

```
<ContentPage
    xmlns:local="clr-namespace:HelloWorld;assembly=HelloWorld">

    <Image Source="{local:EmbeddedImage ResourceId}" />
```

## Platform-specific Images

Add to each application project.

### iOS

- Resources/clock.png
- Resources/clock@2x.png
- Resources/clock@3x.png

## Android

- Resources/drawable/clock.png
- Resources/drawable-hdpi/clock.png
- Resources/drawable-xhdpi/clock.png
- Resources/drawable-xxhdpi/clock.png

## In Code

```
image.Source = ImageSource.FromFile("clock.png");
```

## In XAML

```
<Image Source="clock.png" />
```

## Image Aspects

- **AspectFit** (default): image is scaled to fit the container
- **AspectFill**: image is cropped to fill the container
- **Fill**: image fills the container but it can get distorted

## Activity Indicator

```
<ActivityIndicator
  Color="White"
  IsRunning="{Binding
    Source={x:Reference image},
    Path=IsLoading}" />
```