# Fallback strategy cheat sheet



#### **Basics**

This reactive resilience strategy **allows you to define a substitute value** if the execution fail.

You can configure the behaviour of the strategy via the **FallbackStrategyOptions<T>** object.

### Specify constant value for exception

```
new ResiliencePipelineBuilder<string>()
    .AddFallback(new FallbackStrategyOptions<string>
    {
        ShouldHandle = new PredicateBuilder<string>().Handle<Exception>(),
        FallbackAction = _ => Outcome.FromResultAsValueTask("exception fallback")
    })
```

#### Specify constant value for missing result

```
new ResiliencePipelineBuilder<string>()
    .AddFallback(new FallbackStrategyOptions<string>
{
        ShouldHandle = new PredicateBuilder<string>().HandleResult(string.IsNullOrEmpty),
        FallbackAction = _ => Outcome.FromResultAsValueTask("missing data fallback")
})
```

## Specify value dynamically for inner exception

```
new ResiliencePipelineBuilder<string>()
    .AddFallback(new FallbackStrategyOptions<string>
{
        ShouldHandle = new PredicateBuilder<string>().HandleInner<IOException>(),
        FallbackAction = async args =>
        {
            var fallbackValue = await GetFallbackValueAsync(args.Outcome.Exception!);
            return Outcome.FromResult(fallbackValue);
        }
    })
```

## Specify asynchronously delegate for timeout notification

```
new ResiliencePipelineBuilder<string>()
    .AddFallback(new FallbackStrategyOptions<string>
{
        ShouldHandle = new PredicateBuilder<string>().HandleResult(s => s.Length > 100),
        FallbackAction = args => Outcome.FromResultAsValueTask("too long fallback"),
        OnFallback = async args => await NotifyAsync(args.Outcome.Result!)
})
```