

# Namespace Solstice.Scheduled.Core

## Classes

[CoreBackgroundService](#)

# Class CoreBackgroundService

Namespace: [Solstice.Scheduled.Core](#)

Assembly: Solstice.Scheduled.dll

```
public abstract class CoreBackgroundService : IHostedService
```

## Inheritance

[object](#) ← CoreBackgroundService

## Implements

[IHostedService](#)

## Derived

[CoreQueuedBackgroundService](#), [CoreScopedProcessor<TDbContext>](#)

## Inherited Members

[object.Equals\(object\)](#), [object.Equals\(object, object\)](#), [object.GetHashCode\(\)](#), [object.GetType\(\)](#), [object.MemberwiseClone\(\)](#), [object.ReferenceEquals\(object, object\)](#), [object.ToString\(\)](#)

## Methods

### ExecuteAsync(CancellationTokens)

```
protected virtual Task ExecuteAsync(CancellationTokens cancellationTokens)
```

## Parameters

**cancellationTokens** [CancellationTokens](#)

## Returns

[Task](#)

### ProcessAsync(CancellationTokens)

```
protected abstract Task ProcessAsync(CancellationToken cancellationToken)
```

## Parameters

`cancellationToken` [CancellationToken](#)

## Returns

[Task](#)

# StartAsync(CancellationToken)

Triggered when the application host is ready to start the service.

```
public Task StartAsync(CancellationToken cancellationToken)
```

## Parameters

`cancellationToken` [CancellationToken](#)

Indicates that the start process has been aborted.

## Returns

[Task](#)

A [Task](#) that represents the asynchronous Start operation.

# StopAsync(CancellationToken)

Triggered when the application host is performing a graceful shutdown.

```
public Task StopAsync(CancellationToken cancellationToken)
```

## Parameters

`cancellationToken` [CancellationToken](#)

Indicates that the shutdown process should no longer be graceful.

Returns

[Task](#)

A [Task](#) that represents the asynchronous Stop operation.

# Namespace Solstice.Scheduled.Injections

## Classes

[ScheduledInjections](#)

# Class ScheduledInjections

Namespace: [Solstice.Scheduled.Injections](#)








Assembly: Solstice.Scheduled.dll

```
public static class ScheduledInjections
```

## Inheritance

[object](#)  ← ScheduledInjections

## Inherited Members

[object.Equals\(object\)](#)  , [object.Equals\(object, object\)](#)  , [object.GetHashCode\(\)](#)  , [object.GetType\(\)](#)  , [object.MemberwiseClone\(\)](#)  , [object.ReferenceEquals\(object, object\)](#)  , [object.ToString\(\)](#) 

## Methods

### AddCronServices(IServiceCollection, params Type[])

Injector to add hosted services to the services

```
public static void AddCronServices(this IServiceCollection services, params  
Type[] types)
```

## Parameters

**services** [IServiceCollection](#) 

**types** [Type](#)  []

## Remarks

services.AddCronServices(typeof(HostedService1), typeof(HostedService2), ...)

## Exceptions

[ArgumentException](#) 

# AddQueue(IServiceCollection, int)

Injector to add a queue to the services

```
public static void AddQueue(this IServiceCollection services, int capacity = 100000)
```

## Parameters

services [IServiceCollection](#)↗

capacity [int](#)↗

Queue capacity

# Namespace Solstice.Scheduled.Queue

## Classes

[CoreQueuedBackgroundService](#)

[DefaultBackgroundTaskQueue](#)

[QueueItem](#)

## Interfaces

[IBackgroundTaskQueue](#)

# Class CoreQueuedBackgroundService

Namespace: [Solstice.Scheduled.Queue](#)

Assembly: Solstice.Scheduled.dll

```
public sealed class CoreQueuedBackgroundService : CoreBackgroundService,
    IHostedService
```







## Inheritance

[object](#)  ← [CoreBackgroundService](#) ← CoreQueuedBackgroundService

## Implements

[IHostedService](#) 

## Inherited Members

[CoreBackgroundService.StartAsync\(CancellationToken\)](#) , [object.Equals\(object\)](#)  ,  
[object.Equals\(object, object\)](#)  , [object.GetHashCode\(\)](#)  , [object.GetType\(\)](#)  ,  
[object.ReferenceEquals\(object, object\)](#)  , [object.ToString\(\)](#) 

## Constructors

CoreQueuedBackgroundService(IBackgroundTaskQueue, ILogger<CoreQueuedBackgroundService>)

```
public CoreQueuedBackgroundService(IBackgroundTaskQueue taskQueue,
    ILogger<CoreQueuedBackgroundService> logger)
```

## Parameters

**taskQueue** [IBackgroundTaskQueue](#)

**logger** [ILogger](#)  <[CoreQueuedBackgroundService](#)>

## Methods

ExecuteAsync(CancellationToken)

```
protected override Task ExecuteAsync(CancellationToken stoppingToken)
```

## Parameters

`stoppingToken` [CancellationToken](#)

## Returns

[Task](#)

## ProcessAsync(CancellationToken)

```
protected override Task ProcessAsync(CancellationToken stoppingToken)
```

## Parameters

`stoppingToken` [CancellationToken](#)

## Returns

[Task](#)

## StopAsync(CancellationToken)

```
public Task StopAsync(CancellationToken stoppingToken)
```

## Parameters

`stoppingToken` [CancellationToken](#)

## Returns

[Task](#)

# Class DefaultBackgroundTaskQueue

Namespace: [Solstice.Scheduled.Queue](#)

Assembly: Solstice.Scheduled.dll

```
public sealed class DefaultBackgroundTaskQueue : IBackgroundTaskQueue
```







## Inheritance

[object](#)  ← DefaultBackgroundTaskQueue

## Implements

[IBackgroundTaskQueue](#)

## Inherited Members


[object.Equals\(object\)](#)  , [object.Equals\(object, object\)](#)  , [object.GetHashCode\(\)](#)  , [object.GetType\(\)](#)  , [object.ReferenceEquals\(object, object\)](#)  , [object.ToString\(\)](#) 

## Constructors

### DefaultBackgroundTaskQueue(int)

```
public DefaultBackgroundTaskQueue(int capacity)
```

## Parameters

capacity [int](#) 

## Methods

### ClearChannel()

```
public void ClearChannel()
```

### DequeueAsync(Cancellation\_token)

```
public ValueTask<QueueItem> DequeueAsync(CancellationTok... cancellationToken)
```

## Parameters

cancellationToken [CancellationToken](#)

## Returns

[ValueTask](#) <[QueueItem](#)>

## QueueBackgroundWorkItemAsync(QueueItem)

```
public ValueTask QueueBackgroundWorkItemAsync(QueueItem workItem)
```

## Parameters

workItem [QueueItem](#)

## Returns

[ValueTask](#)

# Interface IBackgroundTaskQueue

Namespace: [Solstice.Scheduled.Queue](#)

Assembly: Solstice.Scheduled.dll

```
public interface IBackgroundTaskQueue
```

## Methods

### ClearChannel()

```
void ClearChannel()
```

### DequeueAsync(CancellationTokens)

```
ValueTask<QueueItem> DequeueAsync(CancellationTokens cancellationTokens)
```

#### Parameters

**cancellationTokens** [CancellationTokens](#)

#### Returns

[ValueTask](#) <[QueueItem](#)>

### QueueBackgroundWorkItemAsync(QueueItem)

```
ValueTask QueueBackgroundWorkItemAsync(QueueItem workItem)
```

#### Parameters

**workItem** [QueueItem](#)

Returns

[ValueTask](#) 

# Class QueueItem

Namespace: [Solstice.Scheduled.Queue](#)








Assembly: Solstice.Scheduled.dll

```
public class QueueItem
```

## Inheritance

[object](#)  ← QueueItem

## Inherited Members

[object.Equals\(object\)](#)  , [object.Equals\(object, object\)](#)  , [object.GetHashCode\(\)](#)  ,  
[object.GetType\(\)](#)  , [object.MemberwiseClone\(\)](#)  , [object.ReferenceEquals\(object, object\)](#)  ,  
[object.ToString\(\)](#) 

## Properties

### Guid

```
public Guid Guid { get; init; }
```

### Property Value

[Guid](#) 

## WorkItem

```
public Func<CancellationToken, Task>? WorkItem { get; init; }
```

### Property Value

[Func](#)  <[CancellationToken](#)  , [Task](#)  >

# Namespace Solstice.Scheduled.Scheduled

## Classes

[CoreScheduledProcessor<TDbContext>](#)

[CoreScopedProcessor<TDbContext>](#)

# Class

## CoreScheduledProcessor<TDbContext>

Namespace: [Solstice.Scheduled.Scheduled](#)

Assembly: Solstice.Scheduled.dll

```
public abstract class CoreScheduledProcessor<TDbContext> :  
    CoreScopedProcessor<TDbContext>, IHostedService where TDbContext : DbContext
```

### Type Parameters

**TDbContext**








### Inheritance

[object](#)   $\leftarrow$  [CoreBackgroundService](#)  $\leftarrow$  [CoreScopedProcessor](#)<TDbContext>  $\leftarrow$   
CoreScheduledProcessor<TDbContext>

### Implements

[IHostedService](#) 

### Inherited Members

[CoreScopedProcessor<TDbContext>.\\_serviceScopeFactory](#) ,  
[CoreScopedProcessor<TDbContext>.ProcessAsync\(CancellationToken\)](#) ,  
[CoreScopedProcessor<TDbContext>.ProcessInScopeAsync\(TDbContext, CancellationToken\)](#)  
 ,  
[CoreBackgroundService.StartAsync\(CancellationToken\)](#) ,  
[CoreBackgroundService.StopAsync\(CancellationToken\)](#) , [object.Equals\(object\)](#)  ,  
[object.Equals\(object, object\)](#)  , [object.GetHashCode\(\)](#)  , [object.GetType\(\)](#)  ,  
[object.MemberwiseClone\(\)](#)  , [object.ReferenceEquals\(object, object\)](#)  , [object.ToString\(\)](#) 

## Constructors

### CoreScheduledProcessor(IServiceScopeFactory)

```
protected CoreScheduledProcessor(IServiceScopeFactory serviceScopeFactory)
```

### Parameters

serviceScopeFactory [IServiceScopeFactory](#)

## Properties

### Schedule

```
protected abstract string Schedule { get; }
```

Property Value

[string](#)

## Methods

### ExecuteAsync(CancellationToken)

```
protected override Task ExecuteAsync(CancellationToken stoppingToken)
```

Parameters

stoppingToken [CancellationToken](#)

Returns

[Task](#)

# Class CoreScopedProcessor<TDbContext>

Namespace: [Solstice.Scheduled.Scheduled](#)


Assembly: Solstice.Scheduled.dll

```
public abstract class CoreScopedProcessor<TDbContext> : CoreBackgroundService,  
IHostedService where TDbContext : DbContext
```

## Type Parameters

TDbContext

## Inheritance

[object](#)  ← [CoreBackgroundService](#) ← CoreScopedProcessor<TDbContext>








## Implements

[IHostedService](#) 

## Derived

[CoreScheduledProcessor<TDbContext>](#)

## Inherited Members

[CoreBackgroundService.StartAsync\(CancellationToken\)](#) ,  
[CoreBackgroundService.StopAsync\(CancellationToken\)](#) ,  
[CoreBackgroundService.ExecuteAsync\(CancellationToken\)](#) , [object.Equals\(object\)](#)  ,  
[object.Equals\(object, object\)](#)  , [object.GetHashCode\(\)](#)  , [object.GetType\(\)](#)  ,  
[object.MemberwiseClone\(\)](#)  , [object.ReferenceEquals\(object, object\)](#)  , [object.ToString\(\)](#) 

## Constructors

### CoreScopedProcessor(IServiceScopeFactory)

```
protected CoreScopedProcessor(IServiceScopeFactory serviceScopeFactory)
```

## Parameters

serviceScopeFactory [IServiceScopeFactory](#) 

# Fields

## \_serviceScopeFactory

`protected readonly IServiceScopeFactory _serviceScopeFactory`

Field Value

[IServiceScopeFactory](#)

# Methods

## ProcessAsync(CancellationTokens)

`protected override Task ProcessAsync(CancellationTokens cancellationTokens)`

Parameters

`cancellationTokens` [CancellationTokens](#)

Returns

[Task](#)

## ProcessInScopeAsync(TDbContext, CancellationTokens)

`public abstract Task ProcessInScopeAsync(TDbContext dbContext, CancellationTokens cancellationTokens)`

Parameters

`dbContext` TDbContext

`cancellationTokens` [CancellationTokens](#)

Returns

