

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(CancellationToken)

```
protected virtual Task ExecuteAsync(CancellationToken cancellationToken)
```

Parameters

cancellationToken [CancellationToken](#)

Returns

[Task](#)

ProcessAsync(CancellationToken)

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

Parameters

cancelationToken [CancellationToken ↗](#)

Returns

[Task ↗](#)

StartAsync(CancellationToken)

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

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

Parameters

cancelationToken [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

cancelationToken [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(CancellationToken)

```
public ValueTask<QueueItem> DequeueAsync(CancellationToken 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(CancellationToken)

```
ValueTask<QueueItem> DequeueAsync(CancellationToken cancellationToken)
```

Parameters

cancellationToken [CancellationToken](#)

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 ↪ CoreBackgroundService ↪ CoreScopedProcessor<TDbContext> ↪  
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(CancellationToken)

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

Parameters

cancellationToken [CancellationToken](#)

Returns

[Task](#)

ProcessInScopeAsync(TDbContext, CancellationToken)

```
public abstract Task ProcessInScopeAsync(TDbContext dbContext,  
CancellationToken cancellationToken)
```

Parameters

dbContext [TDbContext](#)

cancellationToken [CancellationToken](#)

Returns

Task ↗