Namespace Solstice.Scheduled.Core Classes

CoreBackgroundService

Class CoreBackgroundService

Namespace: Solstice. Scheduled. Core

Assembly: Solstice.Scheduled.dll

public abstract class CoreBackgroundService : IHostedService

Inheritance

Implements

IHostedService ☑

Derived

<u>CoreQueuedBackgroundService</u>, <u>CoreScopedProcessor<TDbContext></u>

Inherited Members

<u>object.Equals(object)</u> <u>object.Equals(object, object)</u> <u>object.GetHashCode()</u> , <u>object.GetType()</u> , <u>object.MemberwiseClone()</u> , <u>object.ReferenceEquals(object, object)</u> , <u>object.ToString()</u>

Methods

ExecuteAsync(CancellationToken)

protected virtual Task ExecuteAsync(CancellationToken cancellationToken)

Parameters

Returns

ProcessAsync(CancellationToken)

protected abstract Task ProcessAsync(CancellationToken cancellationToken)

Parameters

Returns

<u>Task</u> ☑

StartAsync(CancellationToken)

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

public Task StartAsync(CancellationToken cancellationToken)

Parameters

Indicates that the start process has been aborted.

Returns

A $\underline{\mathsf{Task}}_{\square}$ that represents the asynchronous Start operation.

StopAsync(CancellationToken)

Triggered when the application host is performing a graceful shutdown.

public Task StopAsync(CancellationToken cancellationToken)

Parameters

Indicates that the shutdown process should no longer be graceful.

Returns

<u>Task</u>♂

A <u>Task</u> d that represents the asynchronous Stop operation.

Namespace Solstice. Scheduled. Injections Classes

<u>ScheduledInjections</u>

Class ScheduledInjections

Namespace: <u>Solstice.Scheduled.Injections</u>

Assembly: Solstice.Scheduled.dll

public static class ScheduledInjections

Inheritance

Inherited Members

Methods

AddCronServices(IServiceCollection, params Type[])

Injector to add hosted services to the services

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

Parameters

types <u>Type</u> []

Remarks

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

Exceptions

AddQueue(IServiceCollection, int)

Injector to add a queue to the services

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

Parameters

services <u>IServiceCollection</u>

☑

capacity <u>int</u>♂

Queue capacity

Namespace Solstice.Scheduled.Queue Classes

<u>CoreQueuedBackgroundService</u>

<u>DefaultBackgroundTaskQueue</u>

Queueltem

Interfaces

<u>IBackgroundTaskQueue</u>

Class CoreQueuedBackgroundService

Namespace: Solstice.Scheduled.Queue

Assembly: Solstice.Scheduled.dll

public sealed class CoreQueuedBackgroundService : CoreBackgroundService,

IHostedService

Inheritance

Implements

IHostedService ☑

Inherited Members

Constructors

CoreQueuedBackgroundService(IBackgroundTaskQueue, ILogger<CoreQueuedBackgroundService>)

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

Parameters

taskQueue <u>IBackgroundTaskQueue</u>

logger <u>ILogger</u> < <u>CoreQueuedBackgroundService</u> >

Methods

ExecuteAsync(CancellationToken)

protected override Task ExecuteAsync(CancellationToken stoppingToken) Parameters Returns **Task** ☑ ProcessAsync(CancellationToken) protected override Task ProcessAsync(CancellationToken stoppingToken) Parameters Returns **Task** ☑ StopAsync(CancellationToken) public Task StopAsync(CancellationToken stoppingToken) **Parameters**

Returns

Task ☑

Class DefaultBackgroundTaskQueue

Namespace: Solstice.Scheduled.Queue

Assembly: Solstice.Scheduled.dll

public sealed class DefaultBackgroundTaskQueue : IBackgroundTaskQueue

Inheritance

<u>object</u> ♂ ← DefaultBackgroundTaskQueue

Implements

<u>IBackgroundTaskQueue</u>

Inherited Members

<u>object.Equals(object)</u> <u>object.Equals(object, object)</u> <u>object.GetHashCode()</u> <u>object.GetType()</u> <u>object.ReferenceEquals(object, object)</u> <u>object.ToString()</u> <u>object.ToString() object.ToString() o</u>

Constructors

DefaultBackgroundTaskQueue(int)

public DefaultBackgroundTaskQueue(int capacity)

Parameters

capacity <u>int</u>♂

Methods

ClearChannel()

public void ClearChannel()

DequeueAsync(CancellationToken)

public ValueTask<QueueItem> DequeueAsync(CancellationToken cancellationToken)

Parameters

Returns

<u>ValueTask</u> < <u>QueueItem</u> >

QueueBackgroundWorkItemAsync(QueueItem)

public ValueTask QueueBackgroundWorkItemAsync(QueueItem workItem)

Parameters

workItem **Queueltem**

Returns

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

Returns

<u>ValueTask</u> < <u>QueueItem</u> >

QueueBackgroundWorkItemAsync(QueueItem)

ValueTask QueueBackgroundWorkItemAsync(QueueItem workItem)

Parameters

workItem Queueltem

Returns

Class Queueltem

Namespace: Solstice.Scheduled.Queue

Assembly: Solstice.Scheduled.dll

```
public class QueueItem
```

Inheritance

object

← Queueltem

Inherited Members

<u>object.Equals(object)</u> <u>object.Equals(object, object)</u> <u>object.GetHashCode()</u> , <u>object.GetType()</u> , <u>object.MemberwiseClone()</u> , <u>object.ReferenceEquals(object, object)</u> , <u>object.ToString()</u>

Properties

Guid

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

Property Value

WorkItem

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

Property Value

Func d' < Cancellation Token d', Task d'>

Namespace Solstice. Scheduled. Scheduled Classes

<u>CoreScheduledProcessor<TDbContext></u>

CoreScopedProcessor<TDbContext>

Class CoreScheduledProcessor<TDbContext>

Namespace: <u>Solstice</u>.<u>Scheduled</u>.<u>Scheduled</u>

Assembly: Solstice.Scheduled.dll

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

Type Parameters

TDbContext

Inheritance

<u>object</u>

<u>CoreBackgroundService</u> ← <u>CoreScopedProcessor</u> < TDbContext > ← CoreScheduledProcessor < TDbContext > ←

Implements

IHostedService ☑

Inherited Members

<u>CoreScopedProcessor<TDbContext>._serviceScopeFactory</u>, <u>CoreScopedProcessor<TDbContext>.ProcessAsync(CancellationToken)</u>, <u>CoreScopedProcessor<TDbContext>.ProcessInScopeAsync(TDbContext, CancellationToken)</u>

Constructors

CoreScheduledProcessor(IServiceScopeFactory)

protected CoreScheduledProcessor(IServiceScopeFactory serviceScopeFactory)

Properties

Schedule

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

Property Value

Methods

ExecuteAsync(CancellationToken)

protected override Task ExecuteAsync(CancellationToken stoppingToken)

Parameters

Returns

<u>Task</u> ☑

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

<u>object</u>

✓
CoreBackgroundService
←
CoreScopedProcessor
TDbContext>

Implements

Derived

CoreScheduledProcessor<TDbContext>

Inherited Members

 $\label{lem:coreBackgroundService.StartAsync} $$ CoreBackgroundService.StopAsync(CancellationToken) , $$ CoreBackgroundService.ExecuteAsync(CancellationToken) , object.Equals(object) $\overline{\sigma}$, object.Equals(object) $\overline{\sigma}$, object.GetHashCode() $\overline{\sigma}$, object.GetType() $\overline{\sigma}$, object.ReferenceEquals(object, object) $\overline{\sigma}$, object.ToString() $\overline{\sigma}$.$

Constructors

CoreScopedProcessor(IServiceScopeFactory)

protected CoreScopedProcessor(IServiceScopeFactory serviceScopeFactory)

Parameters

serviceScopeFactory <u>IServiceScopeFactory</u> ✓

Fields

_serviceScopeFactory

protected readonly IServiceScopeFactory _serviceScopeFactory

Field Value

Methods

ProcessAsync(CancellationToken)

protected override Task ProcessAsync(CancellationToken cancellationToken)

Parameters

Returns

Task ☑

ProcessInScopeAsync(TDbContext, CancellationToken)

public abstract Task ProcessInScopeAsync(TDbContext dbContext, CancellationToken cancellationToken)

Parameters

dbContext TDbContext

Returns