



Job Scheduling In ASP.NET MVC



118.4k

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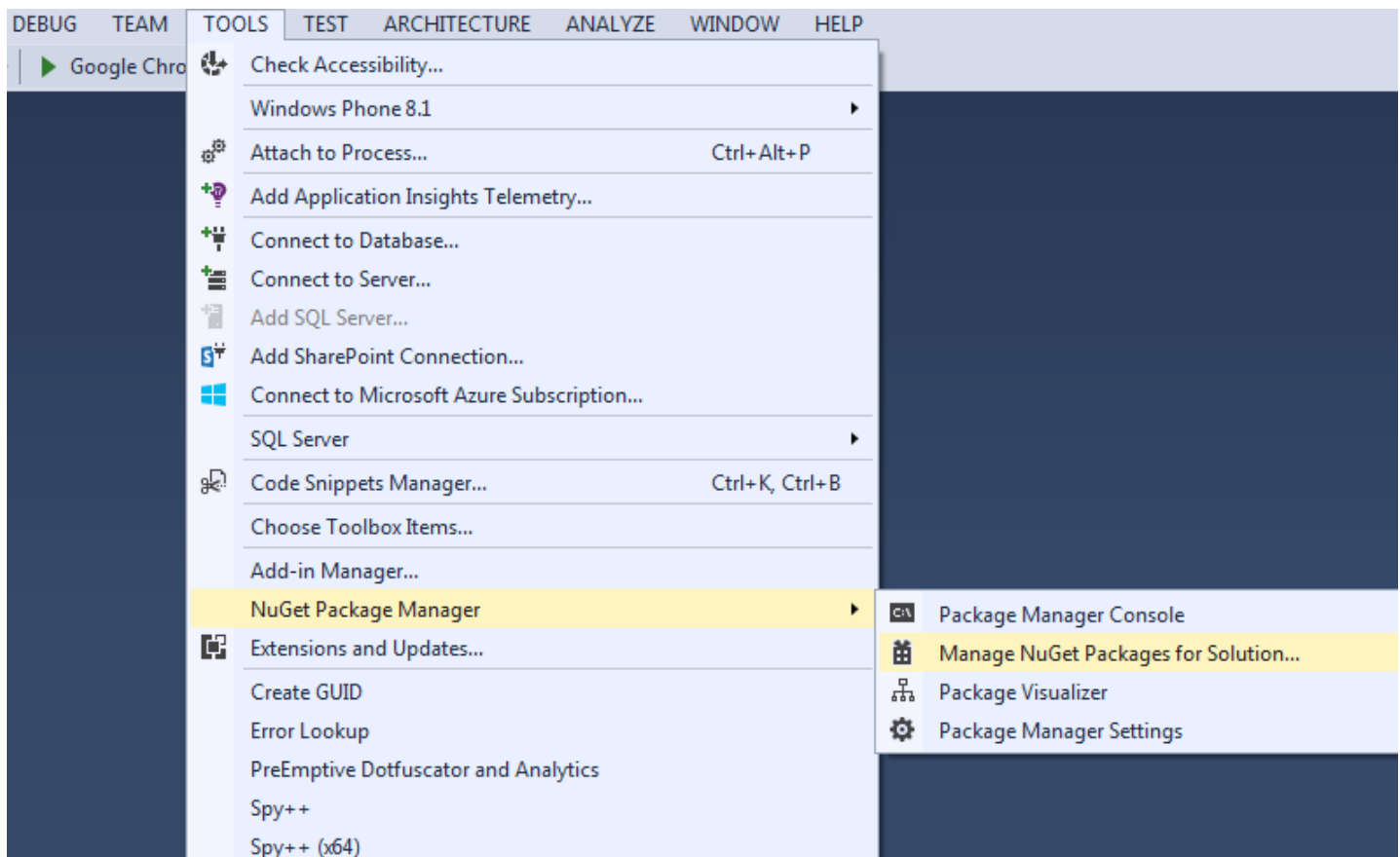
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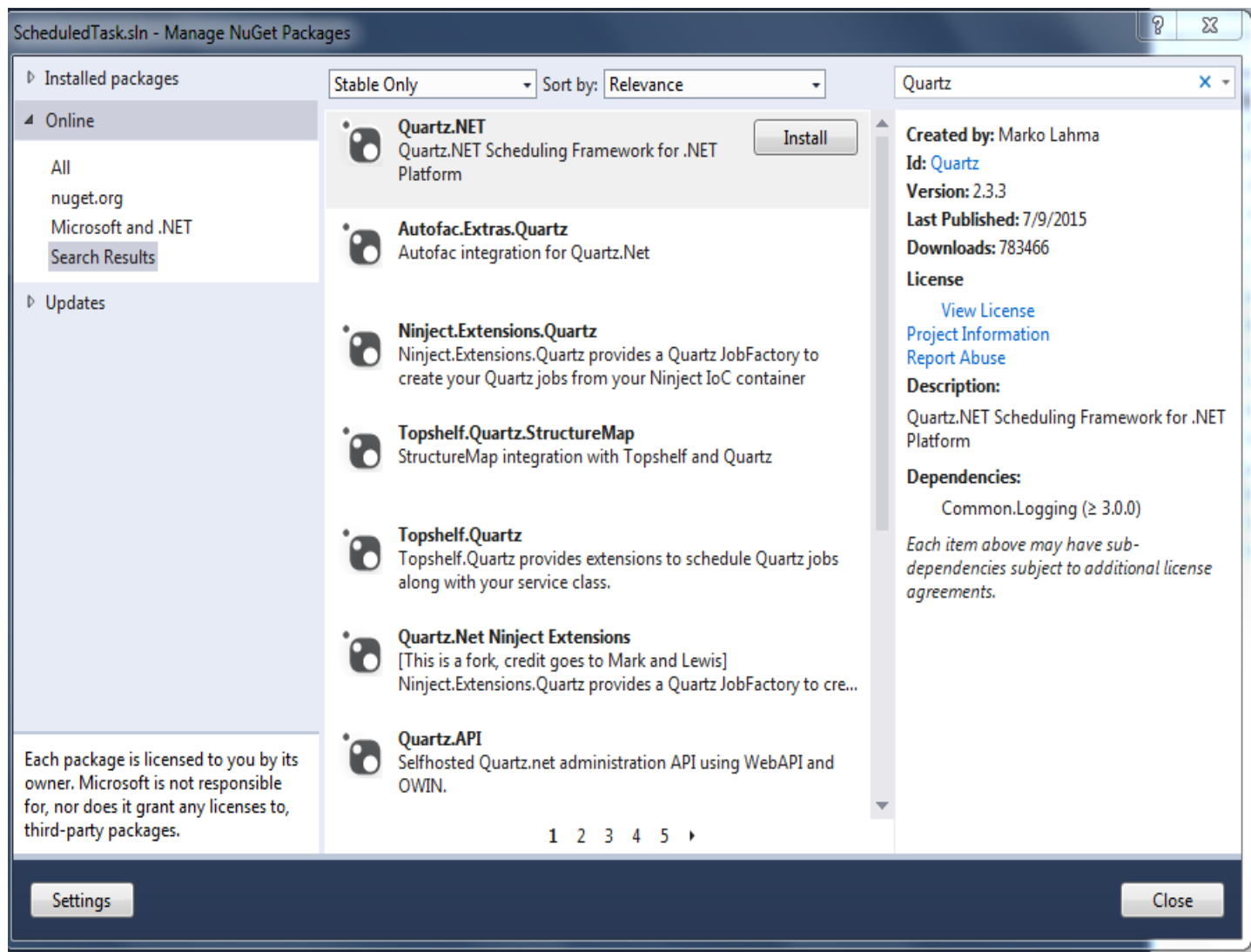
Introduction

Job scheduling in [ASP.NET](#) MVC with Quartz.NET is an open source job scheduling framework written in C# for .NET. job scheduling of background tasks that can be used for any application system. Sometimes everyone gets some issue like bulk email sending one by one that takes lot of time. W can use this job scheduling; it works on background tasks in our Application (MVC or ASP.NET websites)

Figure 1 :

First create a application and install Quartz.NET in our application is via Nuget ,



**Figure 2 :****Three major categories are :**

1. Defining Job
2. Job Trigger
3. Job Schedule

Job is the task, Job Trigger is when the job is executed. Job and trigger are combined for execution with the JobScheduler . We have to create a job class which implements the IJob interface defined by quartz.net. This class is called by the quartz.net scheduler at the configured time and should therefore contain your send mail functionality

Defining Job



calling the job's Execute method.

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```

01. using System;
02.
03.
04. using System.Web;
05. using Quartz;
06. using System.Net;
07. using System.Net.Mail;
08.
09.
10. namespace ScheduledTask.Models
11. {
12.     public class Jobclass:IJob
13.     {
14.         public void Execute(IJobExecutionContext context)
15.         {
16.             using (var message = new MailMessage("testuser@gmail.com", "testdestina
17.             {
18.                 message.Subject = "Message Subject test";
19.                 message.Body = "Message body test at " + DateTime.Now;
20.                 using (SmtpClient client = new SmtpClient
21.                 {
22.                     EnableSsl = true,
23.                     Host = "smtp.gmail.com",
24.                     Port = 587,
25.                     Credentials = new NetworkCredential("testuser@gmail.com", "1235
26.                 })
27.                 {
28.                     client.Send(message);
29.                 }
30.             }
31.         }
32.     }
33. }
34.

```

Job Trigger

Actual code has been placed in a method called Start A scheduler is created and started the job is created using the Quartz.NET JobBuilder.Create<Jobclass> method, where *Jobclass* is the type of job to be created. Then a trigger is created when a Job should be executed.

We want to run this Job WithIntervallnSeconds once in Seconds . So our trigger definition will look like,

```

01. using System;
02. using System.Collections.Generic;
03. using System.Linq;
04. using System.Web;
05. using Quartz;
06. using Quartz.Impl;
07.
08. namespace ScheduledTask.Models
09. {
10.     public class JobScheduler

```



```

13.         {
14.             IScheduler scheduler = StdSchedulerFactory.
15.             scheduler.Start();
16.
17.
18.
19.             ITrigger trigger = TriggerBuilder.Create()
20.             .WithIdentity("trigger1", "group1")
21.             .StartNow()
22.             .WithSimpleSchedule(x => x
23.             .WithIntervalInSeconds(10)
24.             .RepeatForever())
25.             .Build();
26.
27.             scheduler.ScheduleJob(job, trigger);
28.         }
29.     }
30. }

```

There are different types of triggers – Time based, Calendar, Schedule, etc.

JobScheduler in Global asax

The Application_Start event handler in the Global.asax.cs file place for invoke the start method of the JobScheduler.Start, as it would be called the first time the application is started.

Summary:

We learned open source job Scheduling Background Tasks in ASP.NET using Quartz.NET. I hope this article is useful for all .NET beginners.

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Asp.Net

C#

MVC

Quartz.NET

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Web Developer And Programmer In Microsoft Technologies. Here in IT industry for more than 3+ year. Learning new technologies and sharing knowledge, traveling and reading books.

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This is Really a very bad idea of using Quartz in ASP.NET as IIS will stop its Worker Process if there's no request .For IIS to avoid stopping,need to change Pool setting to Always Running ,but it may effect Application Performance.

[Parshuram Kalvikatte](#)

Dec 19, 2019

1881 3 0

1 0 Reply



I have used simple scheduler for a job and it's working fine on local server but on remote server it stops everytime Application_End event is fired. How could i make it work there?

[swati](#)

Jul 19, 2019

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How you solve this problem in remote server.

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Nov 11, 2019

1878 6 0

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Nice....I did as instruct, and when I deploy the project to IIS, it does not work. Please help me!!!!

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good one

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Apr 22, 2016

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Can I run 10k jobs in single application? Suppose I have auction facility in my application and when auction will expire then automatically email will throw to owner that your auction has been expired. So how can I create dynamic Jobs auction wise because there are multiple auctions and multiple sellers.

[Amin Jariwala](#)

Apr 22, 2016

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1 0 Reply



Good Buddy!!

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Apr 12, 2016

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Thank you :)

[Prasanth Radhakrishnan](#)

Apr 13, 2016

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Thank You

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