The purpose of this document is to explain the *Auto-Start Web Application* feature from *IIS 7.*5 and how to enable it in *Plan My Night* application.

# Auto-Start Web Applications

(taken from [ASP.NET 4.0 Whitepaper](http://www.asp.net/learn/whitepapers/aspnet40/#_TOC1_3))

Some Web applications need to load large amounts of data or perform expensive initialization processing before serving the first request. In earlier versions of ASP.NET, for these situations you had to devise custom approaches to "wake up" an ASP.NET application and then run initialization code during the Application\_Load method in the Global.asax file.

A new scalability feature named auto-start that directly addresses this scenario is available when ASP.NET 4 runs on IIS 7.5 on Windows Server 2008 R2. The auto-start feature provides a controlled approach for starting up an application pool, initializing an ASP.NET application, and then accepting HTTP requests.

NOTE: Some information in the previously referenced document is out-dated, the configuration section names and attributes changed. This document reflects how to set up Auto-Start on IIS 7.5 using Windows 7 RTM or Windows 2008 R2

# Enabling Auto-Start

In order to enable the Auto-Start you first need to enable it on the Application Pool and then provide an *AutoStartService* for the application.

NOTE: The current IIS Manager doesn’t have options to configure this feature so you are required to manually edit the IIS configuration file

## Updating applicationHost.config

1. Open applicationHost.config in a text editor (located in in %windir%\System32\inetsrv\config)
2. Go to the <applicationPools> section and add the following entry, it will register a new IIS Pool:

<add name="PlanMyNightPool" managedRuntimeVersion="v4.0.20728" startMode="AlwaysRunning">

<processModel identityType="NetworkService" />

</add>

1. Go to the <sites>section group and add the following <site> entry (update the highlighted parts):

<site name="PlanMyNight" id="2">

<application path="/" applicationPool="PlanMyNightPool" **serviceAutoStartEnabled="true" serviceAutoStartProvider="PlanMyNightPrewarmApp"**>

<virtualDirectory path="/" physicalPath="D:\PlanMyNight\code\PlanMyNight.Web" />

</application>

<bindings>

<binding protocol="http" bindingInformation="\*:80:planmynight.net" />

</bindings>

</site>

1. Under the </sites> section add a new one named *serviceAutoStartProviders*:

<serviceAutoStartProviders>

**<add name="PlanMyNightPrewarmApp" type="Microsoft.Samples.PlanMyNight.Web.PrewarmApplication, PlanMyNight.Web" />**

</serviceAutoStartProviders>

1. Restart your IIS using the **iisreset** command (using command-line window as Administrator)

## PlanMyNight AutoStart provider

The *IProcessHostPreloadClient* interface provides the entry point that will be executed when the IIS application pool is inited or recycled.

public class PrewarmApplication : **IProcessHostPreloadClient**

{

**public void Preload(string[] parameters)**

{

// Retreive reference data from repository (will fill cache automatically)

ServiceFactory.ReferenceRepositoryInstance.RetrieveStates();

var types = ServiceFactory.ActivitiesRepositoryInstance.RetrieveActivityTypes().ToArray();

// Do dummy search to cache Bing token

ServiceFactory.ActivitiesRepositoryInstance.Search(new AdvancedSearchCriteria { ActivityTypeId = types[0].Id, City = "Manhattan", State = "NY", PageSize = 5, Page = 1, Type = SearchType.Activity });

}

}