

通过WNS和Windows Azure发布通知

姓名

职位

公司



会议内容



查看实时磁贴

使用Windows推送通知服务的深入研究

介绍Windows 8的Windows Azure工具箱

你会学会下面例子,如何

让你的应用程序使用推送通知
使用Windows Azure创建推送服务

开始的实时磁贴

演示



通过推送通知
实现实时磁铁

Start

Ben
Martens 

mattberg@live.com

RE: Wedding Announcement!
Congratulations! I'm really excited to
celebrate with you all. Thanks for the ...



12



First ever surfboard kickflip
recorded in Santa Cruz

Make awesome apps
BUILD conference
9:00 AM - 11:00 AM



13
TUESDAY



Video



People



Internet Explorer



Now Playing

Eliza
Viper Creek Club
Letters



Photos

6



Control Panel

Wind
Explo



Store



Messaging



78° Anaheim, CA

Tomorrow 88° / 65°
Thursday 87° / 65°
Friday 89° / 65°

Weather

Investments ▲ 2.3%

▲ 3.6% Roth IRA (TD Ameritrade)
▲ 2.7% 401K Fund (Fidelity)
▼ 1.4% Investment Portfolio



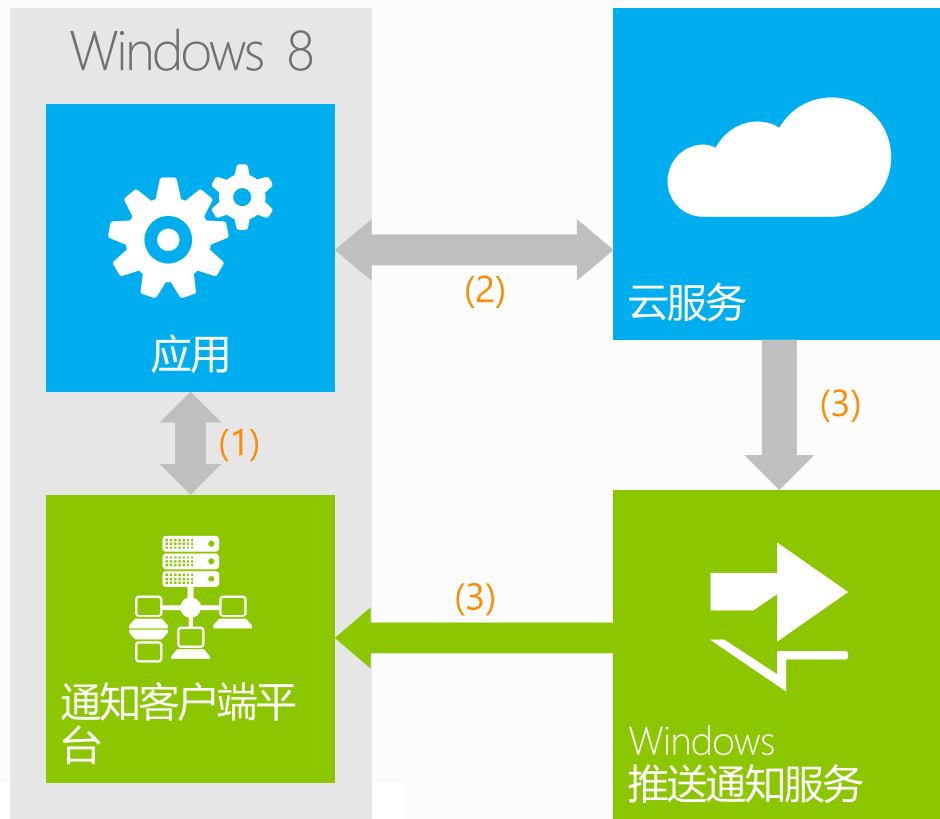
Desktop

First ever surfboard kickflip recorded in Santa
Cruz by surfer Zoltan Torkos, collects \$10,000
prize



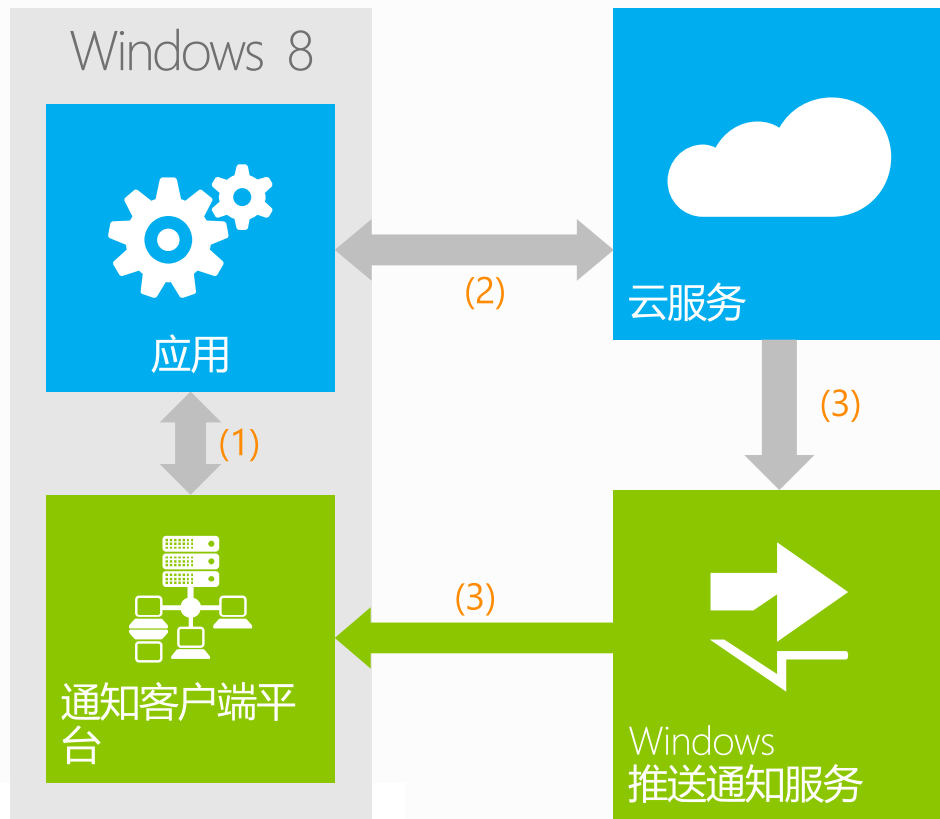
Windows 推送通知服务 (WNS)

推送通知介绍



1. 请求渠道URI
2. 与你的云服务注册
3. 认证和推送通知

1. 请求渠道URI



每个磁铁拥有一个唯一的渠道URI

在每次执行的时候被应用程序请求。URI会改变。

通过WNS生成

对应用透明

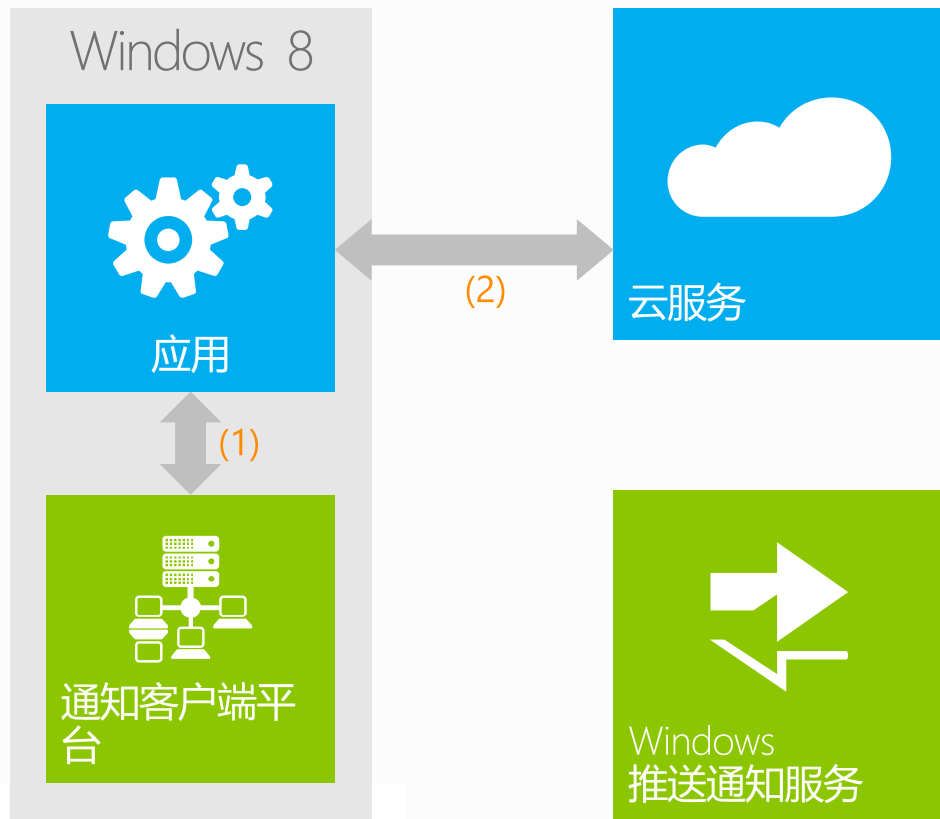
1.请求渠道URI

```
var push = Windows.Networking.PushNotifications;  
var promise = push.PushNotificationChannelManager  
                .createPushNotificationChannelForApplicationAsync();
```

<https://db3.notify.windows.com/?token=AQI8iP%2OtQE%3d>

```
promise.then(function (ch) {  
    var uri = ch.uri;  
    var expiry = ch.expirationTime;  
    updateChannelUri(uri, expiry);  
});
```

2.与你的云服务注册



和你自己的云服务注册你的应用

应该被认证和安全

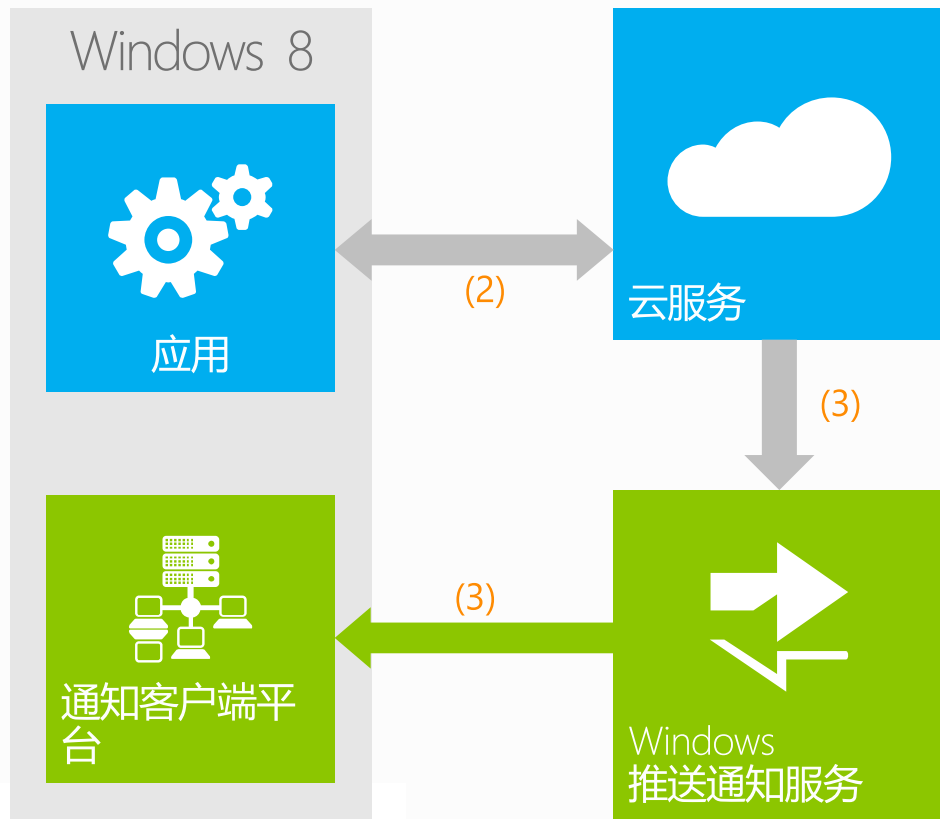
存储渠道URI并且和任何应用定义的上下文关联

为了发送通知创建你的商业逻辑

2.与你的云服务注册

```
function updateChannelUri(channel, channelExpiration) {  
    if (channel) {  
        var serverUrl = "https://mysampleapp.cloudapp.net/register";  
        var payload = { Expiry: channelExpiration.toString(),  
                        URI: channel };  
        var xhr = new WinJS.xhr({  
            type: "POST",  
            url: serverUrl,  
            headers: { "Content-Type": "application/json; charset=utf-8" },  
            data: JSON.stringify(payload)  
        }).then(function (req) { ... });  
    }  
}
```

3. 认证和发送通知



OAuth 2 认证

HTTP POST到渠道URI

XML 通知有效负载

3. 注册你的应用

The screenshot shows the Windows Azure Developer Center interface. The browser address bar displays `https://manage.dev.live.com/Build/Confirmation/48`. The page title is "Developer Center" and the user is logged in as "Darren Louie". The navigation menu includes "Home", "Dashboard", "Learn", "Samples", "Downloads", and "Community". The "My applications" section shows "My Sample App". The main heading is "Windows Push Notifications & Live Connect" with a "Congratulations" message. The text states: "Your application has been configured and you can use the information below to access Windows Push Notification Services (WNS) and Live Connect services." The "Step 3" section instructs the user to "Copy and paste the package name into your application manifest in Visual Studio 11 Express as shown below." Three orange arrows point to the following configuration details:

- Package name: BUILD.b5714152-210b-413b-a6b8-b8f373d86519
- Client secret: XEvTg3USjIpvdWLBfcv44sJHRKcid43QXWfNx3YiJ4
- Package Security Identifier (SID): ms-app://S-1-15-2-1633617344-1232597856-4562071667-7893084900-2692585271-282905334-531217761

At the bottom, there is a section titled "package.appxmanifest" with a description: "The properties of the deployment package for your application are contained in the application manifest file. You can use this designer to set or modify many of the properties."

3. 认证HTTP请求

POST https://login.live.com/accesstoken.srf HTTP/1.1

Content-Type: application/x-www-form-urlencoded

Host: login.live.com

Content-Length: 221

grant_type=client_credentials&client_id=ms-app%3A%2F%2FS-1-15-2-1633617344-1232597856-4562071667-7893084900-2692585271-282905334-531217761&client_secret=XEvTg3USjIpdvWLBfcv44sJHRKcid43QXWfNx3YiJ4g&scope=notify.windows.com

3.认证HTTP响应

HTTP/1.1 200 OK

Cache-Control: no-store

Content-Length: 422

Content-Type: application/json

Connection: close

```
{  
  "access_token": "EgAcAQMAAAAg/RBw++jdA1MzM0LTUzMTIxNzc2MQA=",  
  "token_type": "bearer"  
}
```

3. 推送通知HTTP请求

```
POST https://db3.notify.windows.com/?token=AQI8iP%20tQE%3d
HTTP/1.1
```

```
Content-Type: text/xml
```

```
Host: db3.notify.windows.com
```

```
X-WNS-Type: wns/badge
```

```
Authorization: Bearer EgAcAQMAAAAg/RBw++jdA1MzM0LTUzMTIxNzc2MQA=
```

```
Content-Length: 58
```

```
<?xml version="1.0" encoding="utf-8"?>
<badge value="34"/>
```



3. 推送通知HTTP响应

HTTP/1.1 200 OK

Content-Length: 0

X-WNS-NOTIFICATIONSTATUS: received

X-WNS-MSG-ID: 1ACD59E4683FE4BF

X-WNS-DEBUG-TRACE: DB3WNS4011434

重要的注解

设备可以使离线或者断线。成功意味着请求成功被WNS接受，用户不必看到它。在响应中，对通知和设备状态有额外的头信息

Windows 推送通知回
执



Install-Package WnsRecipe

3. 认证嗲吗

//引用从NuGet安装的WnsRecipe命名空间

```
using NotificationsExtensions;
```

// 构造函数需要你的包SID和密钥

```
IAccessTokenProvider _tokenProvider = new WnsAccessTokenProvider(  
    "ms-app%3A%2F%2FS-1-15-2-1633617344-1232597856-4562071667-  
7893084900-2692585271-282905334-531217761",  
    "XEvTg3USjIpvdWLBFCv44sJHRKcid43QXWfNx3YiJ4g");
```

3. 推送通知代码

```
//引用从NuGet安装的WnsRecipe命名空间
using NotificationsExtensions;
using NotificationsExtensions.ToastContent;
// 通过WnsRecipe NuGet包发送面包片通知(Toast)
var toast = ToastContentFactory.CreateToastImageAndText02();
toast.Image.Src = "https://demosa.blob.core.windows.net/toastImg1.png";
toast.TextHeading.Text = "Miguel Saenz comment on your status";
toast.TextBodyWrap.Text = "I love that quote! How have you ...";

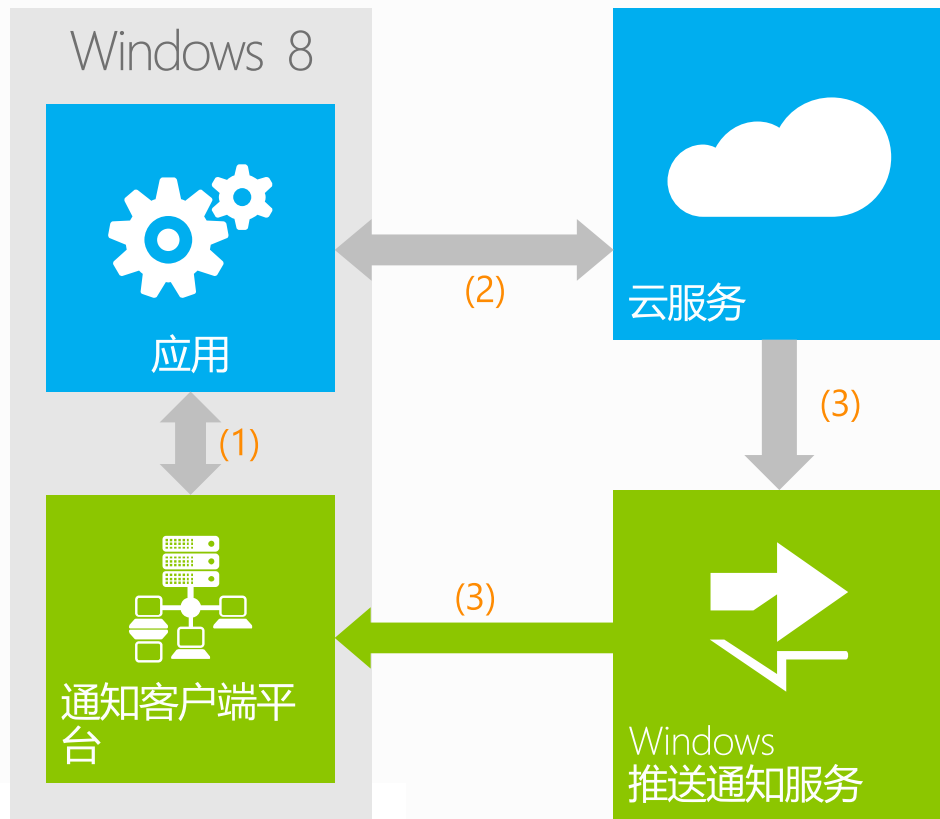
NotificationSendResult result =
    toast.Send(new Uri("https://db3.notify.windows.com/?token=AQI8iP%20tQE%3d")
        , _tokenProvider);
```



Miguel Saenz commented on
your status
I love that quote! How have you...



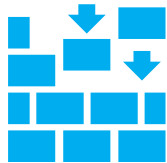
推送消息总结



1. 请求渠道URI
2. 与你的云服务注册
3. 认证和推送通知

用Windows Azure创建一个云服务

一个服务 需要支持的地方

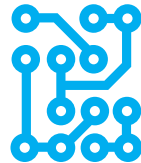


渠道URI注册需要安全,基于Web的API

渠道URI持久的存储

存储磁铁和面包片的图像

如何在 Windows Azure上实现?



Windows Azure 计算

Web 角色

完整IIS 支持

ASP.NET MVC 和 Web API

Windows Azure 存储

表存储

Blob存储

基于WNS 的Windows 8 推送消息 和Windows Azure



演示

Windows Azure提供了
随着你的应用成长扩展你的服务的资源

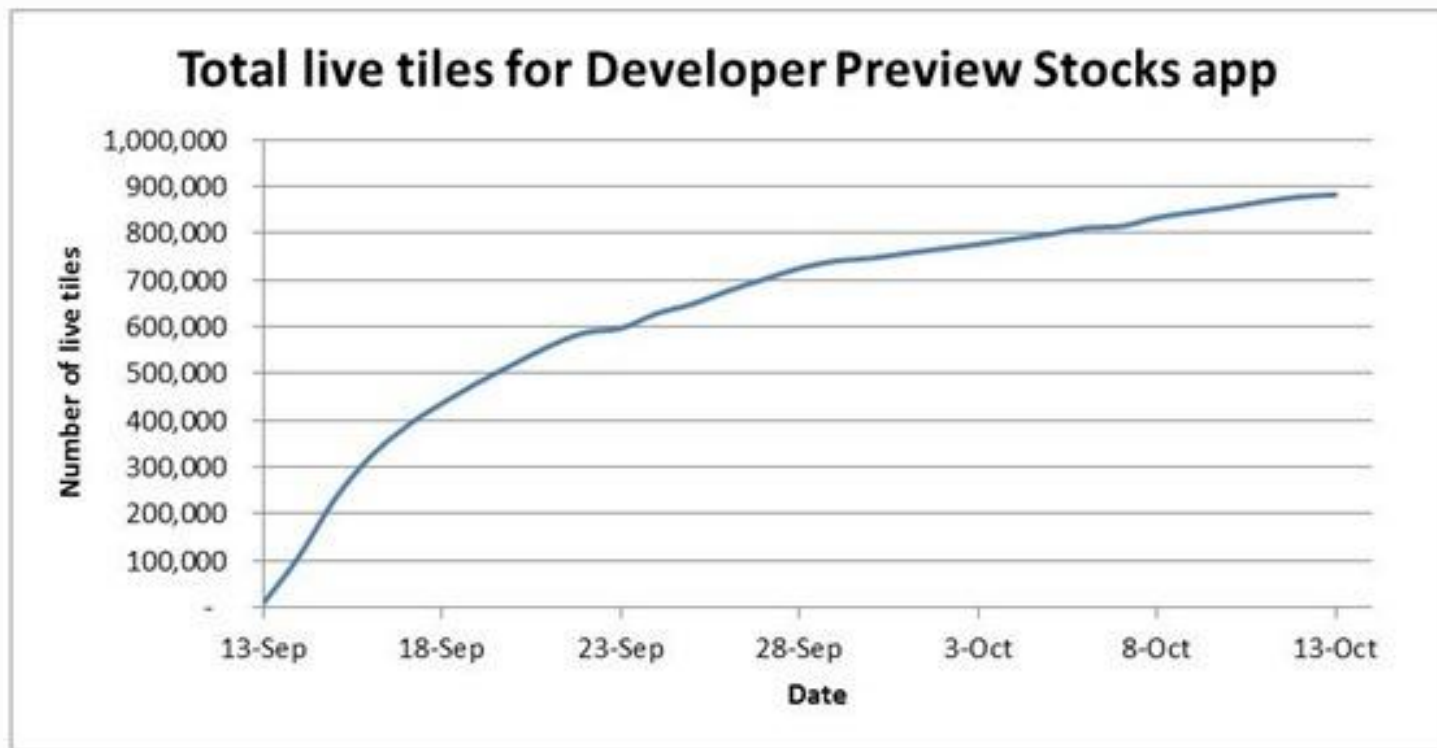


图4:注册到开发预览应用的实时磁铁

来源: <http://blogs.msdn.com/b/b8/archive/2011/11/02/updating-live-tiles-without-draining-your-battery.aspx>

Windows Azure 服务



核心服务

Windows Azure 计算

Web 角色

Worker 角色

Windows Azure 存储

表存储

Blob 存储



帮助规模化的服务

Windows Azure 弹性扩展性

Windows Azure CDN

Windows Azure 流量管理器

Windows Azure 缓存

总结



总结

三个简单的步骤来实现推送通知

请求
渠道URI

注册
和你的云服务

认证和推送

WNSRecipe帮助你简单地把推送消息添加到你的服务中

Windows Azure Windows 8工具箱是开始创建服务的最好方法

Windows Azure提供了随着你的应用增长而扩展你的而服务的资源

资源

使用WNS注册你的应用来测试

<http://manage.dev.live.com/build>

下载Windows 8 Windows Azure工具箱

<http://WATWindows8.codeplex.com>

WnsRecipe NuGet

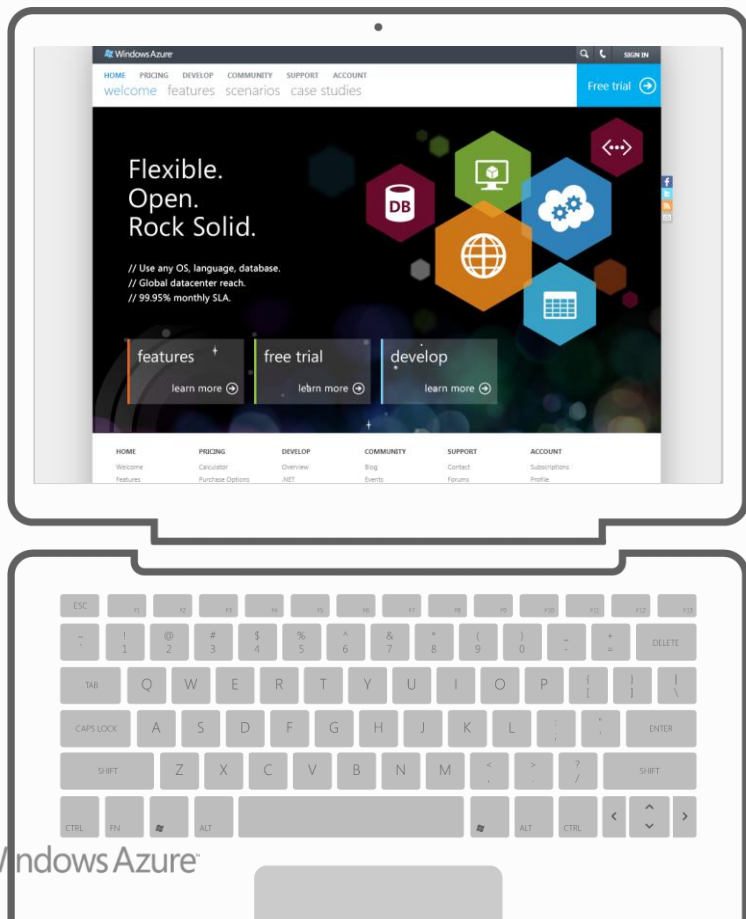
<http://nuget.org/packages/wnsrecipe>

通过Windows 8和Windows Azure创建连接的应用

<http://channel9.msdn.com/Events/TechEd/Europe/2012/AZR310>

Windows 8 开发文档

<http://dev.windows.com>



从现在开始.

<http://WindowsAzure.com>



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