



MadPoint  
SharePoint Technical  
Community Madrid

#content #people #SharePoint #apps #develop  
#search #Office 365 #cloud #farm #communities  
#sites #BI #ECM #insights  
#business #Office #workflows #IT  
#Welcome

Colaboran:



Plain Concepts



**spenta**



**Microsoft**



**Beezy**  
Social at work



#MadPoint



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Senior Consultant

Spenta / Beezy

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# Office 365 Apps

# Office 365 Device Apps



Board name	Function
<input type="text" value="company name"/>	<input type="text" value="title"/>
Username	Password
<input type="text" value="username"/>	<input type="text" value="password"/>
Site URL	Site Language
<input type="text" value="https://mycompany.sharepoint.com"/>	<input type="text" value="Dansk"/>
<input type="button" value="Save"/>	<input type="button" value="Test"/>
<input type="button" value="Cancel"/>	

<input type="text" value="URL"/>	
<input type="text" value="USER NAME"/>	
<input type="password" value="....."/>	
Authentication Type	<input type="text" value="Windows"/>
<input checked="" type="checkbox"/> Save Site	
<input type="button" value="Login"/>	
<input type="button" value="Cancel"/>	

Sign Into Session Picker Demo App

Username:	<input type="text" value="mattleib@img geeky.ccsctp.net"/>
Password:	<input type="password" value="....."/>
<input type="button" value="Login"/>	
<input type="button" value="Cancel"/>	

Welcome to SharePoint Newsfeed!

SharePoint Newsfeed lets you stay connected to your organization at work, at home and on the go. You can easily browse messages from people you're following and respond to conversations happening across your SharePoint sites.

[Enter newsfeed URL manually](#)



# Azure Active Directory (Azure AD)

- Included in Office 365 Subscription
- Users & Groups managed in Office 365 Portal
  - Changes persisted in Azure AD

Microsoft Azure | CREDIT STATUS | paul@wtofficedevtraining.onmicrosoft.com

Office 365 admin center «

Search users, admin tasks and more

DASHBOARD | ACTIVE USERS

Single sign-on: [Set up](#) | [Learn more](#)  
Active Directory® synchronization: [Set up](#) | [Learn more](#)  
[Manage mail contacts](#) | [Manage resource mailboxes](#)  
Change the password expiration policy for your organization  
Set Multi-factor authentication requirements: [Set up](#)

Select a view: All users

	DISPLAY NAME	USER NAME	STATUS
<input type="checkbox"/>	Joe	joe@wtofficedevtraining.onmicrosoft.com	In cloud
<input type="checkbox"/>	Paul	paul@wtofficedevtraining.onmicrosoft.com	In cloud

wingtip office developer training

USERS | GROUPS | APPLICATIONS | DOMAINS | DIRECTORY INTEGRATION | CONFIGURE | REPORTS

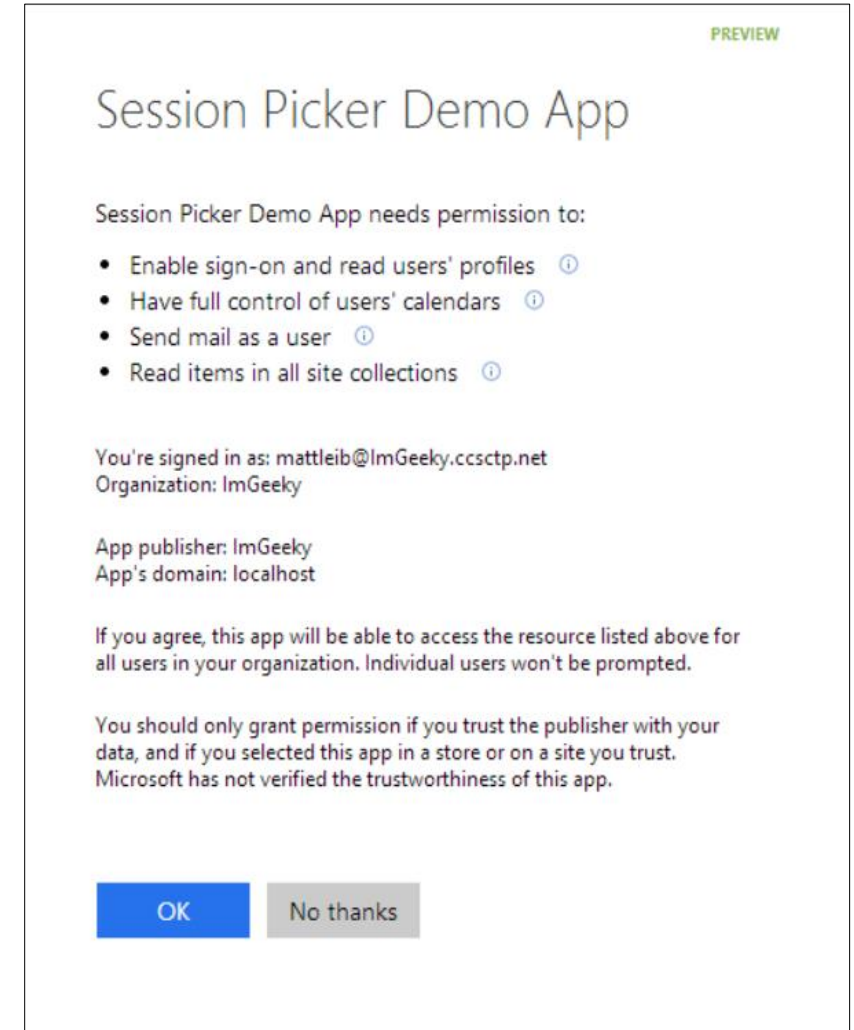
LICENSES

DISPLAY NAME	USER NAME	SOURCED FROM
Joe	joe@wtofficedevtraining.onmicrosoft.com	Windows Azure Active Directory
Paul	paul@wtofficedevtraining.onmicrosoft.com	Windows Azure Active Directory



# Azure AD OAuth in Office 365

- Single auth flow for Office 365
  - Azure AD Graph, Exchange, SharePoint
  - Device apps and web sites
  - Admin and end-user consent
- Secure protocol
  - OAuth 2.0
  - No capturing user credentials
  - Fine-grained access scopes
  - Supports MFA and federated user sign-in
  - Long-term access through refresh tokens



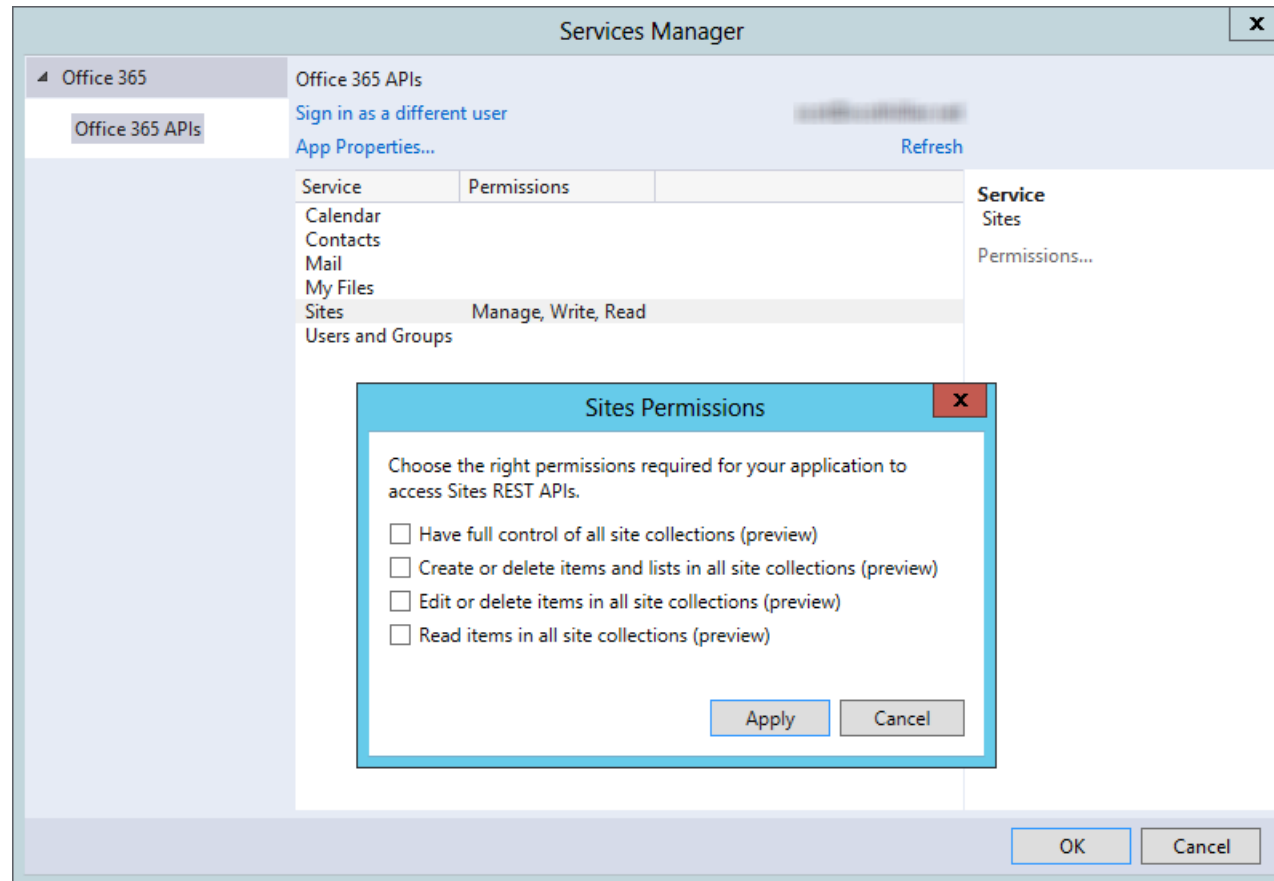


# O365 Discovery Service

- Returns a collection of endpoints specific to current user
- Intended as the starting point for application
  - 1. Sign-In
  - 2. Get authorized
  - 3. Discover endpoints for resource
  - 4. Get Token
  - 5. Access resource
- API Libraries simplify necessary code



# Connected Services in Visual Studio





Connecting Calendar, Mail, and Contacts



# Office 365 APIs for Calendar, Mail and Contacts

- Office 365 APIs
  - Mail Message API
  - Calendar Events API
  - Contacts API
- Office 365 APIs accessible through REST
  - <https://outlook.office365.com/api/v1.0/Me/Messages>
  - <https://outlook.office365.com/api/v1.0/Me/Events>
  - <https://outlook.office365.com/api/v1.0/Me/Contacts>
- Office 365 APIs accessible through OutlookServicesClient
  - A library which abstracts away sending and receiving REST request



# Mail Messages

- Common API operations

- Reading messages
- Deleting messages
- Sending messages
- Working with attachments

Message	
✎	BccRecipients
✎	CcRecipients
✎	ConversationId
✎	DateTimeCreated
✎	DateTimeReceived
✎	DateTimeSent
✎	EventId
✎	From
✎	IsDeliveryReceiptRequested
✎	IsDraft
✎	IsRead
✎	IsReadReceiptRequested
✎	LastModifiedTime
✎	MeetingMessageType
✎	ParentFolderId
✎	ReplyTo
✎	Sender
✎	ToRecipients
✎	UniqueBody

The screenshot shows the Microsoft Office 365 Outlook web interface. The top navigation bar includes 'Office 365', 'Outlook', 'Calendar', and 'People'. The left sidebar shows a 'new mail' button and a 'Favorites' section with 'Inbox', 'Sent Items', and 'Drafts [1]'. The main area displays an email inbox with two messages from the 'Microsoft Online Services Team'. The right sidebar shows the details of the selected email, including the sender 'Ted Pattison' and the subject 'To help protect your privacy, some content in here.'.



# Calendar Events

- Common API operations

- Reading events for specific date range
- Creating events
- Deleting events
- Editing events

Office 365 Outlook Calendar People

new event September 2014

jan feb mar apr may jun jul aug sep oct nov dec go

search calendar

SEPTEMBER 2014

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
31 11a Test appoin	Sep 1	2	3	4 Museum Openi	5	6
7	8 Bake Cake	9	10	11 Big Code-a-thoi	12	13 Bob's Keg Party

Event

- Attendees
- Calendar
- End
- IsAllDay
- IsCancelled
- IsOrganizer
- Location
- Recurrence
- ResponseRequested
- SeriesId
- ShowAs
- Start
- Type



# Contacts

## • Common API operations

- Reading contacts
- Searching for contacts
- Creating contacts
- Deleting contacts
- Editing events

Contact	
AssistantName	ImAddress1
Birthday	ImAddress2
BusinessHomePage	ImAddress3
BusinessPhone1	Initials
BusinessPhone2	JobTitle
CompanyName	LastModifiedTime
DateTimeCreated	Manager
Department	MiddleName
DisplayName	MobilePhone1
EmailAddress1	NickName
EmailAddress2	OfficeLocation
EmailAddress3	OtherPhone
FileAs	ParentFolderId
Generation	Profession
GivenName	Surname
HomePhone1	Title
HomePhone2	



# Coding the Discovery Service

```
//Create a DiscoveryClient using the authorization code
disco = new DiscoveryClient(new Uri(discoEndpoint), async () =>
{
    var authResult = await authContext.AcquireTokenByAuthorizationCodeAsync(
        code,
        new Uri(Request.Url.AbsoluteUri.Split('?')[0]),
        creds);

    return authResult.AccessToken;
});

//Discover required capabilities
CapabilityDiscoveryResult contactsDisco = await disco.DiscoverCapabilityAsync("Contacts");
CapabilityDiscoveryResult filesDisco = await disco.DiscoverCapabilityAsync("MyFiles");
```



# Retrieving Contacts

//Create the OutlookServicesClient

```
outlookClient = new OutlookServicesClient(cdr.ServiceEndpointUri, async () =>
{
    var authResult = await authContext.AcquireTokenByAuthorizationCodeAsync(
        code,
        new Uri(Request.Url.AbsoluteUri.Split('?')[0]),
        creds);

    return authResult.AccessToken;
});
```

//Get the contacts

```
var contactsResults = await outlookClient.Me.Contacts.ExecuteAsync();
List<MyContact> contactList = new List<MyContact>();
```



# Single Sign-On, Multi-Tenant

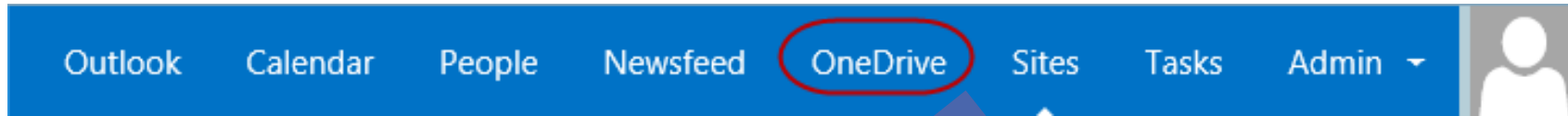
- Important scenario for apps
- Open ID Connect Protocol
- OWIN Middleware
- Azure AD Authentication Library
- GitHub Sample
  - <https://github.com/OfficeDev/O365-WebApp-MultiTenant>



Connecting OneDrive for Business



# OneDrive for Business



A personal library for storing and organizing your work documents

## Documents

Welcome to your OneDrive for Business, the place to store, sync, and share your work. Documents are private until shared. [Learn more here.](#) [Dismiss](#)

[+ new](#) [↑ upload](#) [sync](#) [edit](#) [manage](#) [share](#)

✓	📄	Name	Modified	Sharing
	📁	Shared with Everyone	... July 31, 2013	👥
	📄	O3651-1 Office 365 Developer Overview ✳	... Yesterday at 5:50 AM	🔒
	📄	O3651-2 Office 365 Development App for Office ✳	... Yesterday at 5:51 AM	🔒
	📄	O3651-3 Office 365 Development App for SharePoint ✳	... Yesterday at 5:51 AM	🔒
	📄	O3651-4 - Moving Full Trust Code to the cloud using repeatable patterns and best practices ✳	... Yesterday at 5:51 AM	🔒
	📄	O3651-5 Office 365 Development Office 365 API ✳	... Yesterday at 5:51 AM	🔒
	📄	O3651-6 Getting started with Mobile Development with Office 365 ✳	... Yesterday at 5:52 AM	🔒
	📄	O3651-7 Setting up your Developer environment in Office 365 ✳	... Yesterday at 5:52 AM	🔒



# SharePointClient class

- Discovery Service discovers “MyFiles” capability
  - Returns tenant and user-specific URL for user’s OneDrive for Business
- SharePointClient.Files abstracts Files API

```
//Create the SharePointClient
sharepointClient = new SharePointClient(cdr.ServiceEndpointUri, async () =>
{
    var authResult = await authContext.AcquireTokenByAuthorizationCodeAsync(
        code,
        new Uri(Request.Url.AbsoluteUri.Split('?')[0]),
        creds);

    return authResult.AccessToken;
});

//Get the files
var filesResults = await sharepointClient.Files.ExecuteAsync();
```

# Connecting SharePoint Sites



# SharePoint Sites

- Access the SharePoint REST API with the Access Token

```
//Get the access token
var authResult = await authContext.AcquireTokenByAuthorizationCodeAsync(
    code,
    new Uri(Request.Url.AbsoluteUri.Split('?')[0]),
    creds);

string accessToken = authResult.AccessToken;

//Build SharePoint RESTful API endpoint for the list items
StringBuilder requestUri = new StringBuilder()
    .Append(spSite)
    .Append("/_api/web/lists/getbyTitle('Research Projects')/items");

//POST the data to the endpoint
HttpClient client = new HttpClient();
HttpRequestMessage request = new HttpRequestMessage(HttpMethod.Post, requestUri.ToString());
request.Headers.Accept.Add(new MediaTypeWithQualityHeaderValue("application/xml"));
request.Headers.Authorization = new AuthenticationHeaderValue("Bearer", accessToken);
```



# SharePoint Apps vs Office 365 Apps

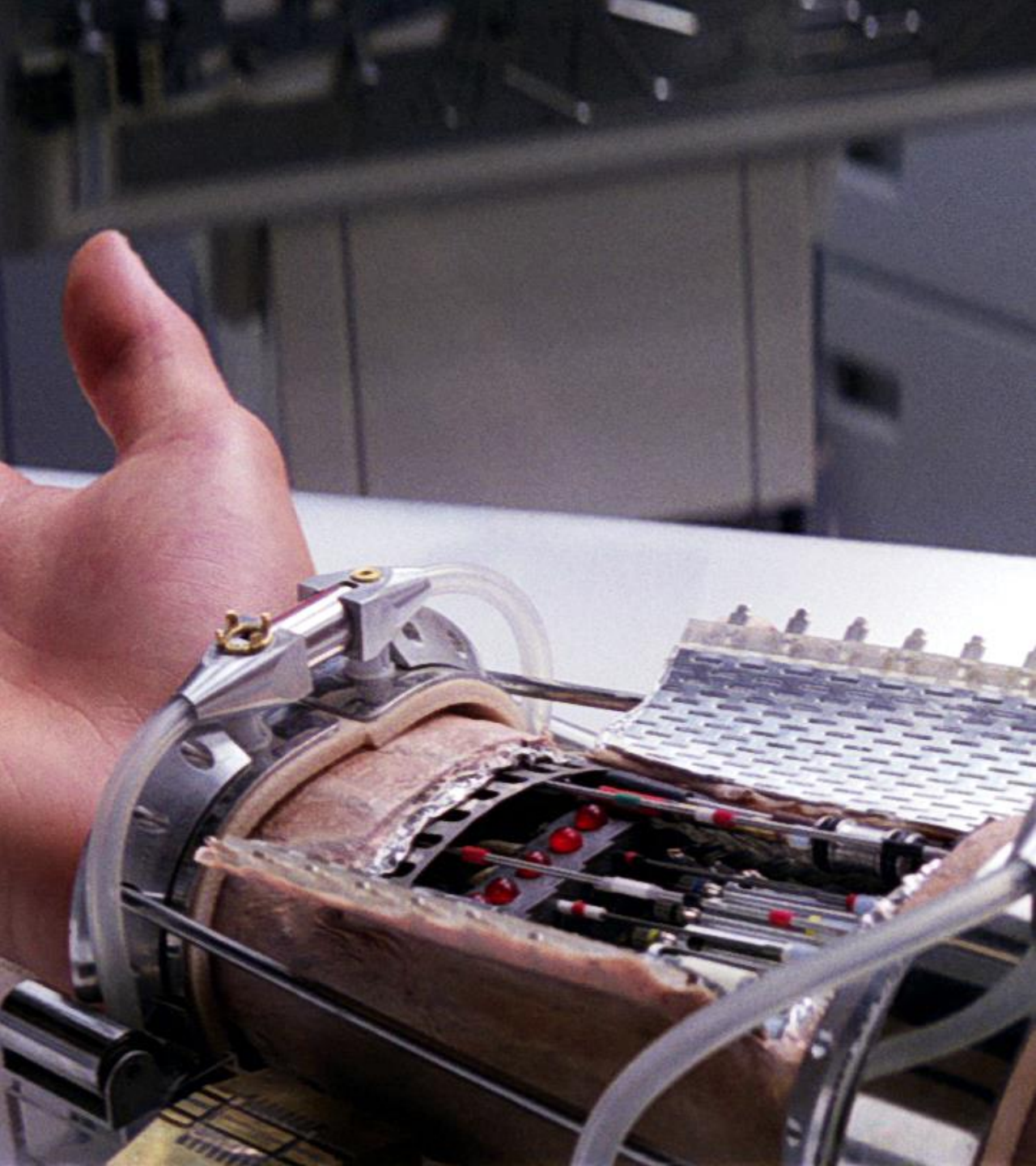


# SharePoint Apps

- Site Scope
- Site permissions
- ClientWebParts
- UI Custom Actions

# O365 Apps

- Tenant level installation
- Unified Azure AD Auth
- Access to Calendar, Mail & Contacts



# Manos a la obra

<https://github.com/OfficeDev/DevCampTraining>





Q&A

Colaboran:



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Social at work



Formación  
Tajamar

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# Thank you!

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