



MICROSOFT TEAMS DEEP DIVE

FROM ARCHITECTURE TO BEST PRACTICES

MAARTEN EEKELS

CTO PORTIVA & MICROSOFT MVP + RD

Make every ESPC18 session count...

1. Connect:

Meet someone new at the start of each session

2. Feedback:

Don't forget to rate this session on the conference app

3. Q&A:

We will allow time to get some of your questions answered

About me



Microsoft
Regional Director

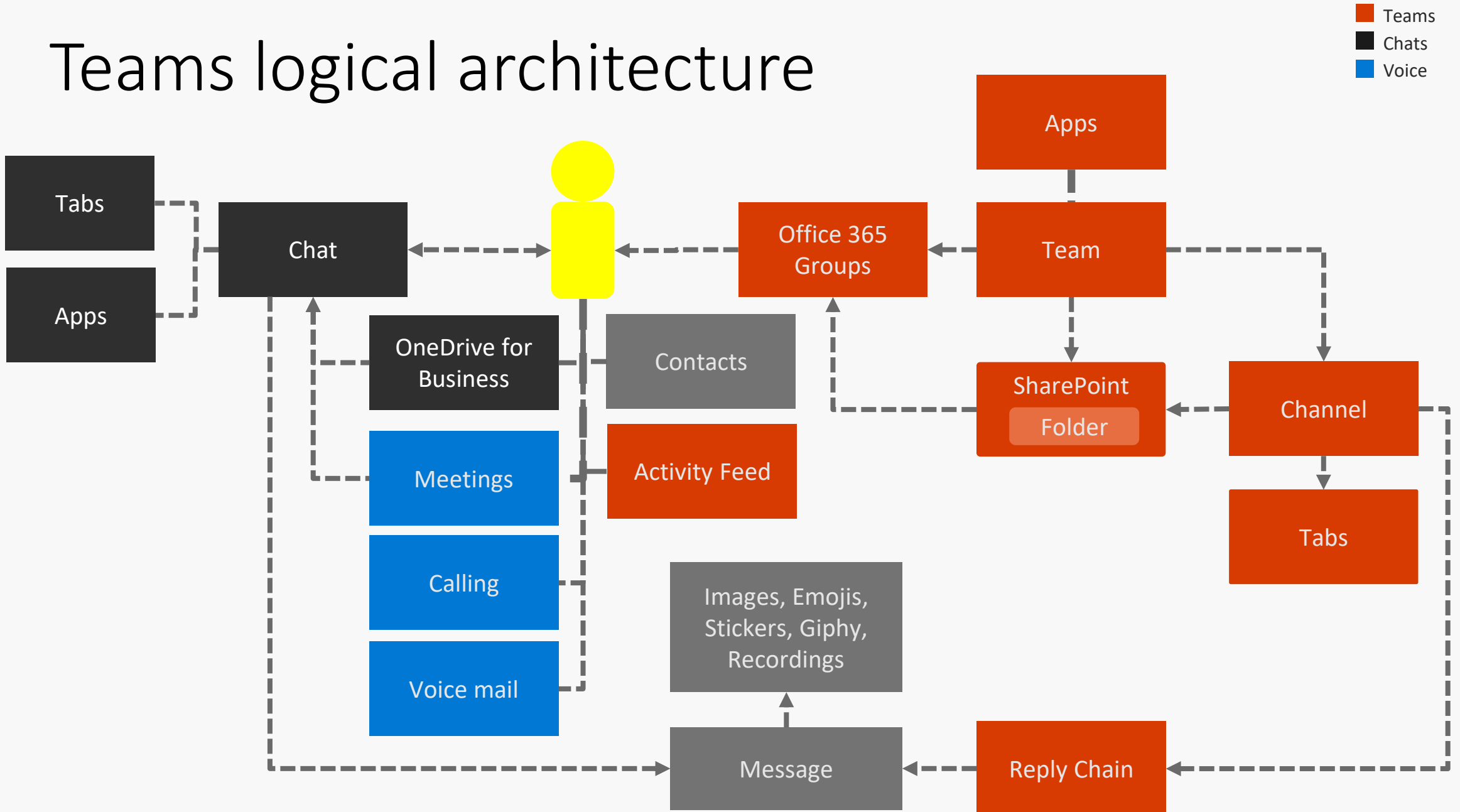


Contact

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Teams logical architecture

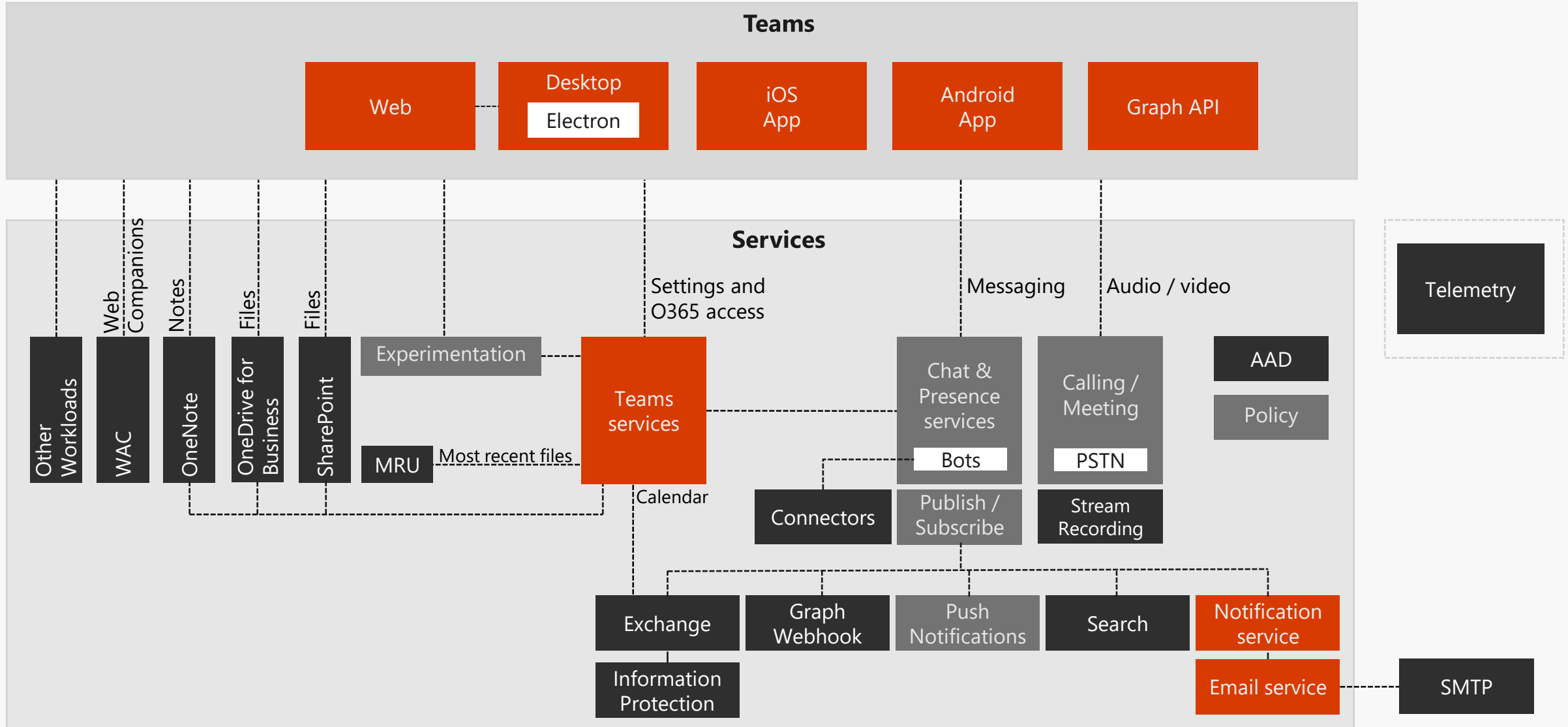


Where is everything stored?

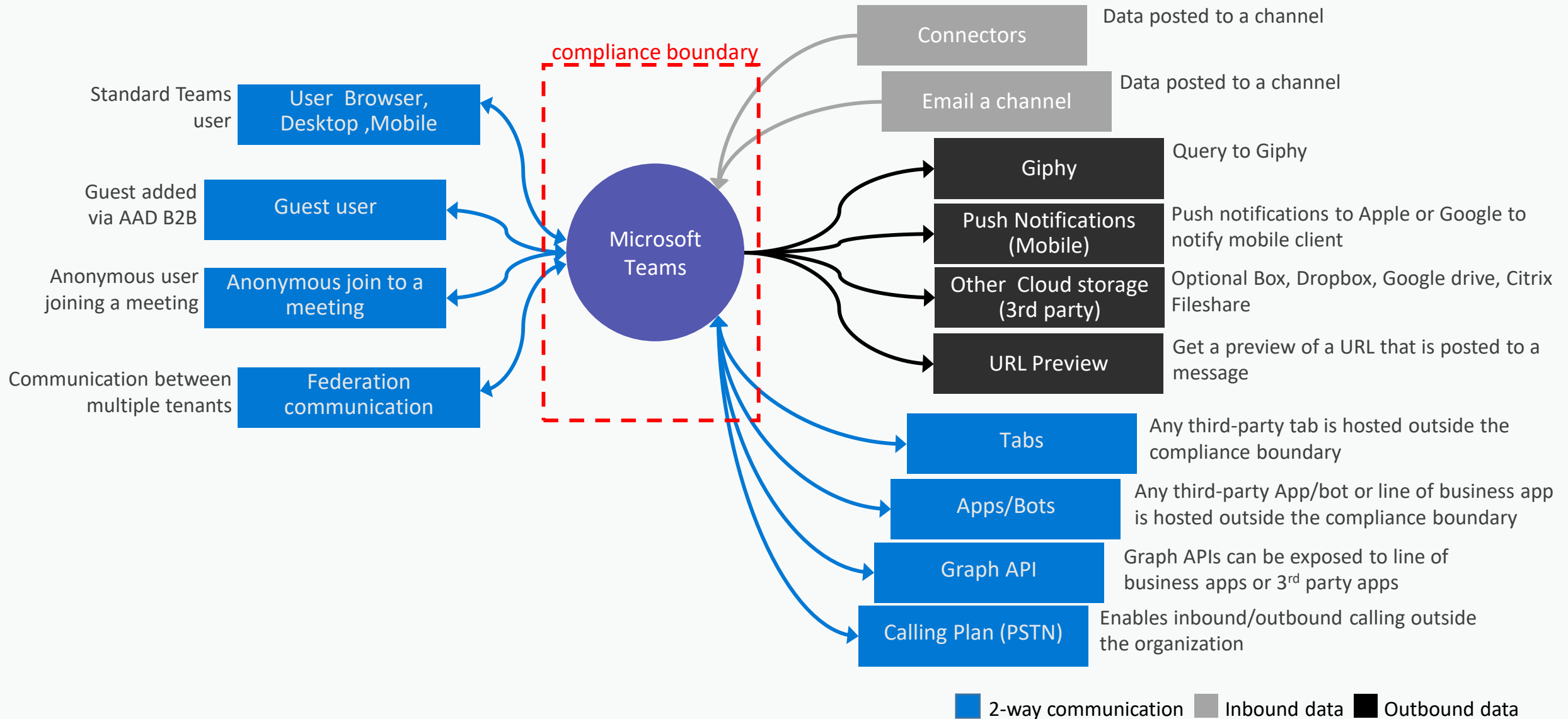
Message	▶ Chat service table storage (moving to Cosmos DB)	▶ Ingested to Exchange to enable compliance
Image	▶ Media service on Azure (using Blob storage)	▶ Ingested to Exchange to enable compliance
Files	▶ Team files → SharePoint Chat files → OneDrive for Business	
Voicemail	▶ Individual mailbox in Exchange	
Recording	▶ Media service on Azure (using Blob storage) (<24 hours)	▶ Encoded to Microsoft Stream
Calendar meeting	▶ Individual mailbox in Exchange	
Contacts	▶ Exchange	
Telemetry	▶ Microsoft Data warehouse (No customer content)	

Teams high level architecture

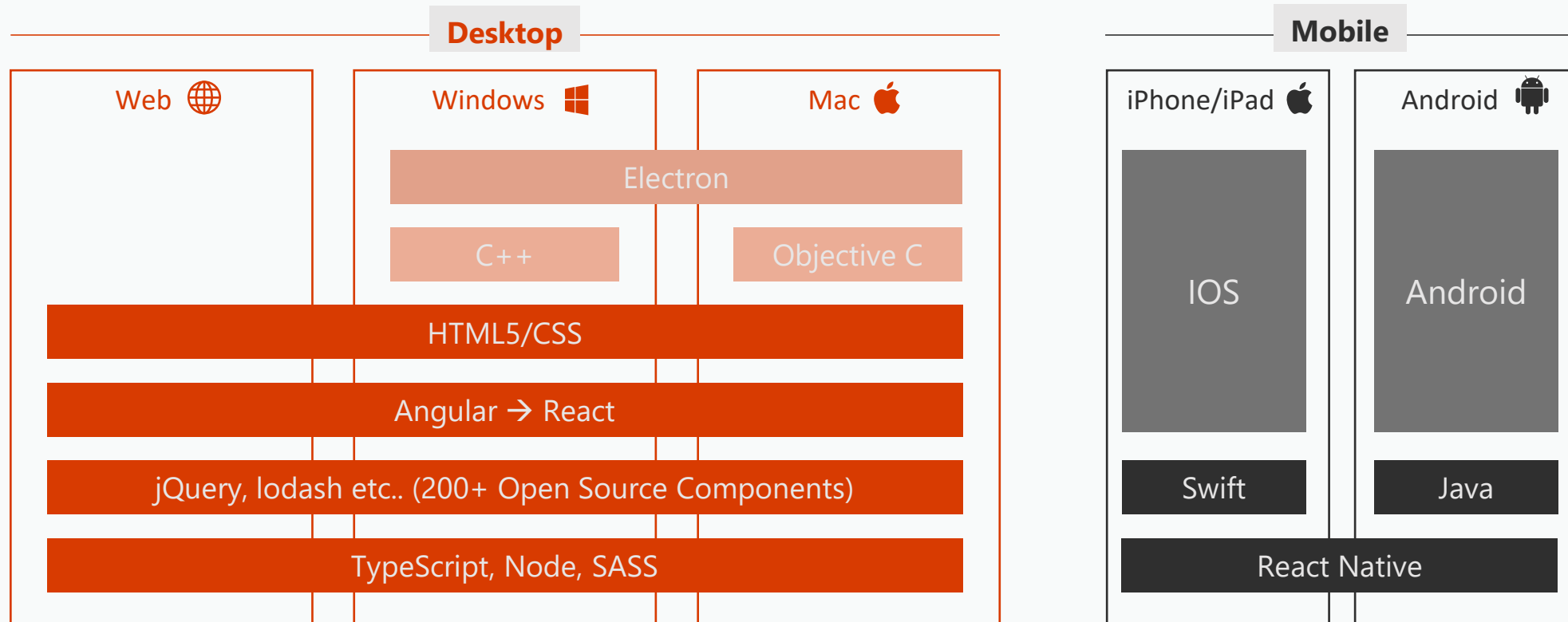
- Microsoft Teams
- Intelligent Communications
- Microsoft 365 Core services



Outside the compliancy perimeter



Teams client



Browsers: Edge, IE11, latest Chrome, latest Firefox | Desktop: Windows 10, 8.1, 7(SP1), Mac OS X 10.10+

Memberships and Roles

	Team Owner	Team Member	Team Guest
Create team	✓	-	-
Leave team	✓	✓	✓
Edit team name/description	✓	-	-
Delete team	✓	-	-
Add channel	✓	✓*	✓*
Edit channel name/description	✓	✓*	✓*
Delete channel	✓	✓*	✓*
Add members	✓	-	-
Add tabs	✓	✓*	-
Add connectors	✓	✓*	-
Add bots	✓	✓*	-

* Can be restricted through Team Settings by the owner

Teams Admin Roles

- **Teams Service Administrator:** The overall Teams workload admin, who can also manage and create O365 Groups.
- **Teams Communication Administrator:** This role can manage meetings and calling functionality in Microsoft Teams.
- **Teams Communications Support Engineering:** Users who are assigned this role have access to advanced call analytics tools.
- **Teams Communications Support Specialist:** This role has access to basic call analytics tools.

General



These are the general settings for Meeting policies. [Learn more.](#)

Allow Meet Now



On

Allow the Outlook add-in



On

Allow Channel meeting scheduling



On

Allow scheduling private meetings



On

Audio & video



Audio and video settings let you turn on or off features that are used during Teams meetings. [Learn more.](#)

Allow transcription [?](#)



On

Allow cloud recording



On

Allow IP video



On

Media bit rate (KBs) [?](#)

50000



On

Allow senders list (separated each domain with a comma)

contoso.net,microsoft.com

Settings

Member permissions

Enable

Allow

Allow

Allow

Allow

Allow

Owner

Give n

Give n

Gener

☒ A

☐ A

☐ C

Team code

Share this code so people can join the team directly – you won't get join requests

mlxdj2v

↗ Full screen ↺ Reset 🗑 Remove 📄 Copy

Fun stuff

Allow emoji, memes, GIFs or stickers

Giphy

Enable Giphy for this team



Filter out inappropriate content using one of the setting below:

Moderate



Stickers and memes

Enable stickers and memes



Customised Memes

Allow memes to be uploaded



Team Expiry

See when your team will be expiring or up for renewal

As per policy, your team will expire on 30/01/2019. Contact your IT admin for more information on expiration policies.

[Renew Now](#)

Manage Teams with PowerShell

`Install-Module -Name MicrosoftTeams`

`Get-Team`

```
PS C:\Users\Maarten> Get-Team
```

GroupId	DisplayName	Description
6f7ecaf9-7785-4505-9001-0db0886470ae	Cloud Journaal	Cloud Journaal
0222a19d-f28d-43c3-957c-98d5507db00a	SPS Helsinki	SPS Helsinki
17118aa6-971e-49f9-93b3-27324cecc090	Documentsjablonen	Documentsjablonen
c9146b37-7625-42a4-b022-88b6f51ed9b8	Microsoft Tech Summit	Microsoft Tech Summit
271155d9-eaee-4060-9009-f66c0def078e	Valo Summit	Valo Summit

```
$groupId = (Get-AzureADGroup -SearchString "<group name>").objectId
```

```
Get-TeamFunSettings -GroupId $groupId
```

```
Get-TeamMemberSettings -GroupId $groupId
```

```
Get-TeamGuestSettings -GroupId $groupId
```

Allow only specific people to create Teams

Azure Active Directory versie 2 PowerShell module required

<https://docs.microsoft.com/en-us/powershell/azure/overview?view=azureadps-2.0>

```
Connect-AzureAD
```

```
Get-AzureADDirectorySetting
```

```
$Policy = Get-AzureADDirectorySettingTemplate -Id 62375ab9-6b52-47ed-826b-58e47e0e304b
```

```
$Setting = $Policy.CreateDirectorySetting()
```

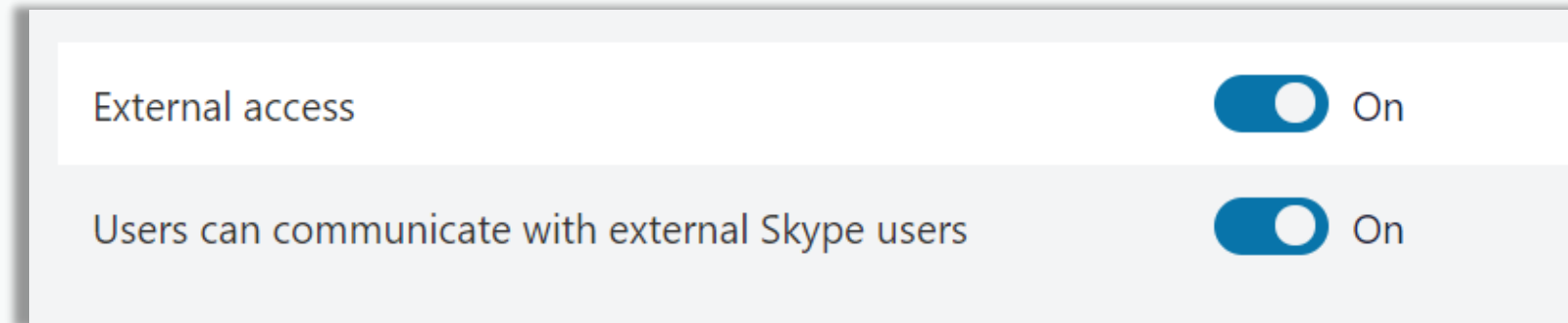
```
$Setting["EnableGroupCreation"] = "false"
```

```
$Setting["GroupCreationAllowedGroupId"] = "your group ID"
```

```
New-AzureADDirectorySetting -DirectorySetting $Setting
```

External guest access

- Default setting: Off for tenants / On for individual Teams
- Disabling or enabling external guest user access for individual Teams is only possible through PowerShell



External Sharing per Team

Disabling or enabling external guest user access is only possible through PowerShell

```
$template = Get-AzureADDirectorySettingTemplate | ? {$_.displayname -eq  
"group.unified.guest"}  
$settings = $template.CreateDirectorySetting()  
$settings["AllowToAddGuests"]=$False  
$groupID = (Get-AzureADGroup -SearchString "<your group name").ObjectId  
Get-AzureADObjectSetting -TargetObjectId $groupID -TargetType Groups | fl  
Values  
New-AzureADObjectSetting -TargetObjectId $groupID -TargetType Groups  
-DirectorySetting $settings  
Get-AzureADObjectSetting -TargetObjectId $groupID -TargetType Groups | Set-  
AzureADObjectSetting -TargetObjectId $groupID -TargetType Groups -  
DirectorySetting $settings
```


DEMO



Office 365 Connectors

- Actionable Messages in Outlook and/or Teams
- 90+ Connectors available today
- Incoming Webhooks
- Possibility to create your own Connectors
<https://dev.outlook.com/connectors>

ESPC18 > Connector

Connectors for "Connector" channel in "ESPC18" team

Keep your group current with content and updates from other services.

Search  All Sort by: Popularity 

MANAGE

Configured

My Accounts

CATEGORY

All

Analytics

CRM

Customer Support

Developer Tools



HR

Marketing



News & Social



Project Management



Connectors for your team



 **Forms** 
Easily create surveys, quizzes, and polls.



All connectors

 **Azure DevOps** 
Collaborate on and manage software projects online.









 **RSS** 
Get RSS feeds for your group.

 **Incoming Webhook** 
Send data from a service to your Office 365 group in real time.

 **JIRA** 
Gather, organize, and assign issues detected in your software.

 **Twitter** 
Send and receive messages called Tweets.

Start a new conversation. Type @ to mention someone.

DEMO

Group expiration

Groups - Expiration

SharePoint and Sushi - Azure Active Directory

«

Save Discard

All groups

Settings

General

Expiration

Activity

Access reviews

Audit logs

Troubleshooting + Support

Troubleshoot

New support request

i

Renewal notifications are emailed to group owners 30 days, 15 days, and one day prior to group expiration. Group owners must have Exchange licenses to receive notification emails. If a group is not renewed, it is deleted along with its associated content from sources such as Outlook, SharePoint, Teams, and PowerBI.

* Group lifetime (in days) ⓘ

Custom ▼

90

* Email contact for groups with no owners ⓘ

maartene@sharepointsushi.com

Enable expiration for these Office 365 groups ⓘ

All

Selected

None

Naming conventions

- `Get-AzureADDirectorySetting`
- `$directorySetting = Get-AzureADDirectorySetting -Id 92efeacc-89c6-4c16-b1cf-107aaf87f7dc`
- `$directorySetting.Values`
- `$directorySetting["PrefixSuffixNamingRequirement"] = "Grp_[Department]_[GroupName]"`
- `$directorySetting["CustomBlockedWordsList"] = "Payroll,CEO,HR"`
- `Set-AzureADDirectorySetting -Id (Get-AzureADDirectorySetting | where -Property DisplayName -value "Group.Unified" -EQ).id -DirectorySetting $directorySetting`
-

Retention policies

Decide if you want to retain content, delete it, or both

Do you want to retain content? [i](#)

☒ Yes, I want to retain it [i](#)

For this long... years

Retain the content based on [i](#)

Do you want us to delete it after this time? [i](#)

☐ Yes ☒ No

☐ No, just delete content that's older than [i](#)

years











Teams channel messages



Teams chats

Archiving Teams

-  Manage team
-  Add channel
-  Add members
-  Leave the team
-  Edit team
-  Get link to team
-  Archive team
-  Delete the team

Want to archive "ESPC18"?

This will freeze all team activity, but you'll still be able to add or remove members and update roles. Go to Manage teams to restore the team. [Learn more.](#)

☐ Make the SharePoint site read-only for team members

Cancel

Archive

DEMO

Thank You!
@maarteneekels