

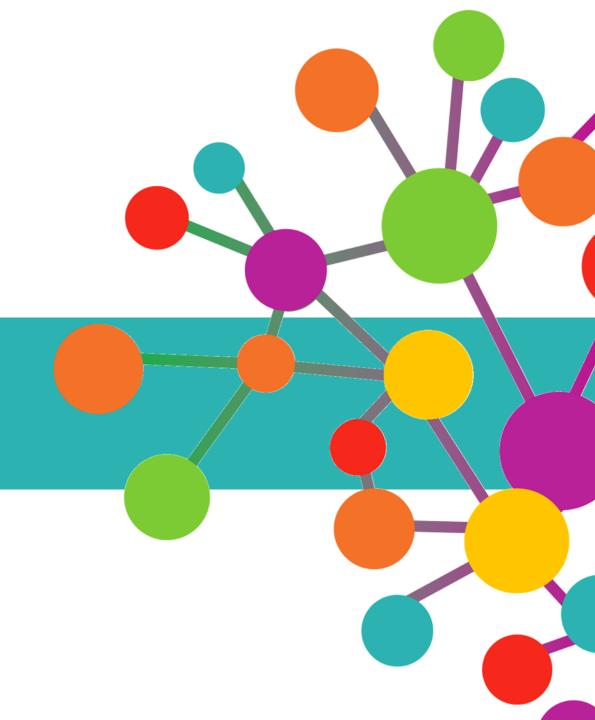


Information Barriers and Supervision Policies in Microsoft Teams



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Microsoft UK



"Businesses and users are going to embrace technology only if they can trust it."

> Satya Nadella Chief Executive Officer Microsoft Corporation



# Information Barriers

#### 1. Learn

You learn about the solution, we learn about you

Agenda

#### 2. Plan

Make informed decisions that influence the design

## 3. Deploy

Decide how we're going to complete the work

4. User experience

- 1. What are Information Barriers
- 2. Use cases and scenarios
- 3. When/who and requirements
- Planning key concepts
- 2. Segments and attributes
- 1. IB deployment workflow
- 2. IB PowerShell generator

- 1. Admin experience
- 2. User experience

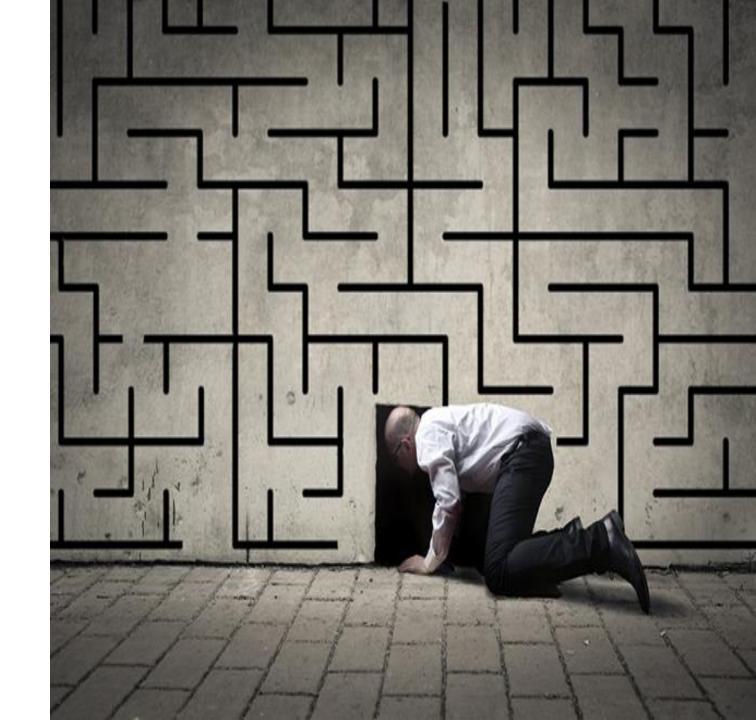
## Learn IB

Information barriers are designed to properly control the flow of information from one part of the organization to another.

Also known as:

Ethical firewall

information barriers are independent from **compliance boundaries**.



#### Information Barriers - Scenarios





#### **Banking & Finance**

Separating advisory and brokering department, protect insider information from being shared



#### **Professional Services**

Group of people inside a company is only allowed to chat with one or few specific groups



#### **Education**

Students in one school/classroom cannot look find contact details of students from different school/classroom



#### **Department of Defense**

Group of peoples presence information cannot be seen



#### **Law Firms**

Prevent information obtained while representing a client from being disclosed to employees in the same firm who represent other clients

The primary driver for information barriers comes from the financial services industry. The Financial Industry Regulatory Authority (FINRA) reviews information barriers and conflicts of interest within member firms and provides guidance as to how to manage such conflicts (FINRA 2241, Debt Research Regulatory Notice 15-31).

#### What you should know about IB

### **Functional**

Known gotchas and limitations

- In-tenant only. IB do not work across tenants
- Using bots to add users not supported in v1
- Works with new and existing threads
- Managed in S&CC (PowerShell only)

## Scope

- Prevent lookup and discovery
- Applies to:
  - private chat (1:1, group)
- Currently does not apply to:
  - SPO or ODFB
  - Email

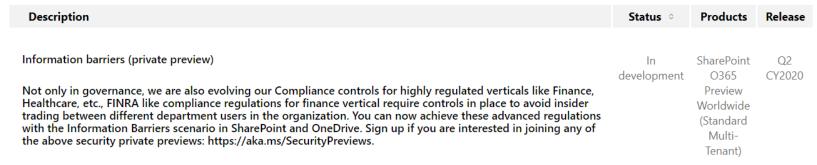


License requirements

What licenses do you need?

- Microsoft 365 E5
- Office 365 E5
- Office 365 Advanced Compliance
- Microsoft 365 E5 Information Protection and Compliance

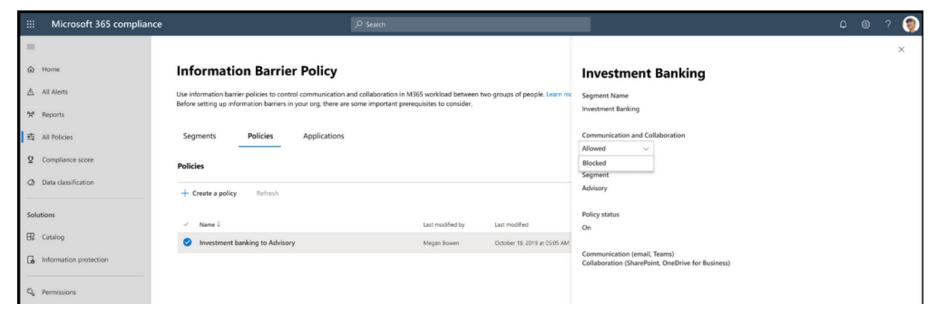
## New announcements at Ignite 2019



#### More info

Featured ID: 57313 Added to Roadmap: 11/4/2019 Last Modified: 11/4/2019

Tags: SharePoint, O365, Preview, Worldwide (Standard Multi-Tenant)



## When are IB policies checked?

- ✓ Searching for a user
- ✓ Add users to a Team<sup>(\*)</sup>
- ✓ New chat is requested (1:1, group)
- ✓ Users invited to Teams meetings
- ✓ Screen sharing (2 or more users)
- ✓ Teams call



(\*) From within Teams. However admin can still add unapproved users via O365 group membership or Teams Admin Centre

Who creates/edit IB policies?

To define or edit IB policies you need the following access level:

- ✓ Microsoft 365 global administrator
- ✓ Office 365 global administrator
- ✓ Compliance administrator
- ✓ IB Compliance Management (this is a new role!)



## What about existing threads?

Users who were engaged in past conversations are now blocked. What happens?

#### • 1:1 Chat

- Existing chats become read-only
- Further chat blocked

#### Group chat

- User(s) who violate the policy are removed from the group
- Further chat blocked
- Old conversation can still be seen

#### Team

- Removed from the team
- Unable to see or participate in existing or new conversations



# Plan IB

## **IB** key concepts

- User account attributes: defined in Azure Active Directory (or Exchange Online). AD attributes that can be used to group users are .... hold your breath for next slide
- Segments: sets of users that are defined in the Office 365 Security & Compliance Center using a selected user account AD attribute
- Information barrier policies determine communication limits or restrictions.
   When you define information barrier policies, you choose from two kinds of policies:
  - "Block" policies prevent one segment from communicating with another segment.
  - "Allow" policies allow one segment to communicate with only certain other segments
- Policy application: is done after all information barrier policies are defined, and you are ready to apply them in your organization.

## What attributes can be used to segment users?

Azure Active Directory property name	
(LDAP display name)	Exchange property name
Со	Со
Company	Company
Department	Department
ExtensionAttribute1~15	CustomAttribute1~15
MSExchExtensionCustomAttribute1~5	ExtensionCustomAttribute1~5
MailNickname	Alias
PhysicalDeliveryOfficeName	Office
PostalCode	PostalCode
ProxyAddresses	EmailAddresses
StreetAddress	StreetAddress
TargetAddress	ExternalEmailAddress
UsageLocation	UsageLocation
UserPrincipalName	UserPrincipalName
Mail	WindowsEmailAddress
Description	Description
MemberOf	MemberOfGroup

# Design your segmentation approach carefully!

- ✓ no user should belong to two or more segments.
- ✓ Each segment can have only one IB policy applied.



# Deploy IB

## **IB** workflow

Make sure prerequisites are met

Part 1:
Segment
users in your
organization

Part 2: Define IB policies

Part 3: Apply IB policies

(As needed)
Edit a
segment or a
policy

(As needed)
Troubleshoot
a policy

## IB workflow – Make sure prerequisites are met

- Verify that you have the <u>required licenses and permissions</u>
- Verify that your directory includes data for segmenting users (make sure that user account attributes used for IB are consistently populated in AD/AAD or EXO
- Enable scoped directory search for Microsoft Teams
- Make sure audit logging is turned on
- Make sure no Exchange address book policies are in place
- Provide admin consent for Microsoft Teams



## **IB** workflow

Enable scoped directory search for Teams

• https://docs.microsoft.com/en-us/microsoftteams/teams-scoped-directory-search

**Audit Logging** 

• Set-AdminAuditLogConfig -UnifiedAuditLogIngestionEnabled \$true

Ensure no EXO AB policies are in place

Preliminary IB configuration

- \$appId="bcf62038-e005-436d-b970-2a472f8c1982"
- \$sp=Get-AzADServicePrincipal -ServicePrincipalName \$appld
- if (\$sp -eq \$null) { New-AzADServicePrincipal -ApplicationId \$appld }
- if (\$sp -eq \$null) { Get-AzADApplication -ApplicationId \$appld | New-AzAdServicePrincipal }

Provide admin consent for Microsoft Teams

Start-Process

"https://login.microsoftonline.com/common/adminconsent?client\_id=\$appId"

## Run IB configuration

```
PS C:\Users\algiombi\Documents\OneDriv
PS C:\Users\algiombi\Documents\OneDriv
PS C:\Users\algiombi\Documents\OneDriv
ppId
PS C:\Users\algiombi\Documents\OneDriv
Id $AppId | New-AzAdServicePrincipal ]
PS C:\Users\algiombi\Documents\OneDriv
on/adminconsent?client_id=$appId"
PS C:\Users\algiombi\Documents\OneDriv
```



admin@bs291es.onmicrosoft.com

# Permissions requested Accept for your organisation

Information Barrier Processor

App info

This app would like to:

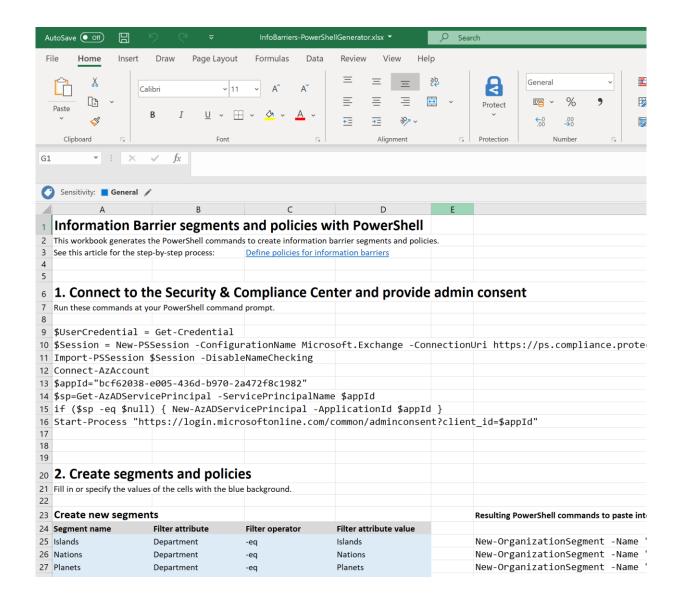
- Read and write directory data
- Read and write all groups
- ✓ Sign in and read user profile

If you accept, this app will get access to the specified resources for all users in your organisation. No one else will be prompted to review these permissions.

Accepting these permissions means that you allow this app to use your data as specified in their Terms of Service and Privacy Statement. **The publisher has not provided links to their Terms for you to review.** You can change these permissions at https://myapps.microsoft.com. Show details

-e005-436d-b970-2a472f8c1982"
icePrincipal -ServicePrincipalName \$a
1) { Get-AzAdApplication -Application
ttps://login.microsoftonline.com/comm

## Meet the InfoBarriers-PowerShellGenerator.xlsx



#### Define policies for information barriers

08/07/2019 • 15 minutes to read • Q Q

#### Overview

With information barriers, you can define policies that are designed to prevent certain segments of users from communicating with each other, or allow specific segments to communicate only with certain other segments. Information barrier policies can help your organization maintain compliance with relevant industry standards and regulations, and avoid potential conflicts of interest. To learn more, see <u>Information barriers</u>.

This article describes how to plan, define, implement, and manage information barrier policies. Several steps are involved, and the work flow is divided into several parts. Make sure to read through the <u>prerequisites</u> and the entire process before you begin defining (or editing) information barrier policies.



Download from Microsoft Docs

https://github.com/MicrosoftDocs/OfficeDocs-O365SecComp/raw/public/SecurityCompliance/media/InfoBarriers-PowerShellGenerator.xlsx

# InfoBarriers-PowerShellGenerator.xlsx

Demo

## Part 1 – Segment users in your organisation

```
New-OrganizationSegment -Name "Islands" -UserGroupFilter "Department -eq 'Islands'"
New-OrganizationSegment -Name "Nations" -UserGroupFilter "Department -eq 'Nations'"
New-OrganizationSegment -Name "Planets" -UserGroupFilter "Department -eq 'Planets'"
```

```
PS C:\Users\algiombi\Documents\OneDrive\Documents\AppData\Scripts> New-OrganizationSegment -Name "Islands" -UserGroupFi
ter "Department -eq 'Islands'"_
                    : 6a1133f2-445e-4d39-95bf-03cd2deaa50b
RunspaceId
                    : OrganizationSegment
UserGroupFilter
                   : Department -eq 'Islands'
ExoSegmentId
                    : 8a74d1d4-764a-41b6-8b8b-2d98f7758ffd
ObjectVersion
                    : f11fca90-c628-4474-978b-08d7392a06a2
                    : Alessio Giombini
CreatedBy
LastModifiedBy
                    : Alessio Giombini
Comment
ModificationTimeUtc : 14/09/2019 15:41:35
CreationTimeUtc
                   : 14/09/2019 15:41:35
Identity
                    : FFO.extest.microsoft.com/Microsoft Exchange Hosted
                      Organizations/BS291ES.onmicrosoft.com/Configuration/Islands
                    : FFO.extest.microsoft.com/Microsoft Exchange Hosted
                      Organizations/BS291ES.onmicrosoft.com/Configuration/Islands
ExchangeVersion
                    : 0.20 (15.0.0.0)
                    : Islands
DistinguishedName
                  : CN=Islands,CN=Configuration,CN=BS291ES.onmicrosoft.com,OU=Microsoft Exchange Hosted
                      Organizations, DC=FFO, DC=extest, DC=microsoft, DC=com
ObjectCategory
ObjectClass
                    : {msExchUnifiedPolicy}
WhenChanged
                    : 14/09/2019 16:41:36
WhenCreated
                    : 14/09/2019 16:41:36
WhenChangedUTC
                    : 14/09/2019 15:41:36
WhenCreatedUTC
                    : 14/09/2019 15:41:36
ExchangeObjectId
                   : 23da7140-b685-4d60-8a70-8358195911f6
OrganizationId
                    : FFO.extest.microsoft.com/Microsoft Exchange Hosted Organizations/BS291ES.onmicrosoft.com
                      FFO.extest.microsoft.com/Microsoft Exchange Hosted
                      Organizations/BS291ES.onmicrosoft.com/Configuration
                    : 23da7140-b685-4d60-8a70-8358195911f6
Guid
OriginatingSe<u>rver</u>
IsValid
                    : True
ObjectState
                    : New
PS C:\Users\algiombi\Documents\OneDrive\Documents\AppData\Scripts>
```



## Part 2 – Define IB policies

```
New-InformationBarrierPolicy -Name "Islands-to-Planets" -AssignedSegment "Islands" -SegmentsBlocked "Planets" -State Active
New-InformationBarrierPolicy -Name "Planets-to-Islands" -AssignedSegment "Planets" -SegmentsBlocked "Islands" -State Active
```

```
PS C:\Users\algiombi\Documents\OneDrive\Documents\AppData\Scripts> New-InformationBarrierPolicy -Name "Islands-to-Plar
   -AssignedSegment "Islands" -SegmentsBlocked "Planets" -State Active
                    : 6a1133f2-445e-4d39-95bf-03cd2deaa50b
RunspaceId
                    : InformationBarrier
                    : Islands
AssignedSegment
SegmentsAllowed
                    : {}
ExoPolicvId
                    : 8997af3f-c7c0-451f-b566-85bcfdffa503
SegmentsBlocked
SegmentAllowedFilter :
BlockVisibility
                     : True
BlockCommunication
State
                    : Active
ObjectVersion
                    : 54b770f0-0dbe-4e4f-9c14-08d7392a8582
CreatedBy
                    : Alessio Giombini
LastModifiedBy
                    : Alessio Giombini
Comment
ModificationTimeUtc : 14/09/2019 15:45:08
CreationTimeUtc
                    : 14/09/2019 15:45:08
Identity
                    : FFO.extest.microsoft.com/Microsoft Exchange Hosted
                      Organizations/BS291ES.onmicrosoft.com/Configuration/Islands-to-Planets
                    : FFO.extest.microsoft.com/Microsoft Exchange Hosted
                      Organizations/BS291ES.onmicrosoft.com/Configuration/Islands-to-Planets
ExchangeVersion
                    : 0.20 (15.0.0.0)
                     : Islands-to-Planets
DistinguishedName
                    : CN=Islands-to-Planets, CN=Configuration, CN=BS291ES.onmicrosoft.com, OU=Microsoft Exchange Hosted
                      Organizations, DC=FFO, DC=extest, DC=microsoft, DC=com
ObjectCategory
ObjectClass
                    : {msExchUnifiedPolicy}
WhenChanged
                    : 14/09/2019 16:45:08
WhenCreated
                    : 14/09/2019 16:45:08
WhenChangedUTC
                    : 14/09/2019 15:45:08
WhenCreatedUTC
                    : 14/09/2019 15:45:08
ExchangeObjectId
                    : 127b210a-9ce4-403c-a918-e51d820d124d
OrganizationId
                    : FFO.extest.microsoft.com/Microsoft Exchange Hosted Organizations/BS291ES.onmicrosoft.com -
                       FFO.extest.microsoft.com/Microsoft Exchange Hosted
                      Organizations/BS291ES.onmicrosoft.com/Configuration
                     : 127b210a-9ce4-403c-a918-e51d820d124d
OriginatingServer
IsValid
                    : True
ObiectState
 RNING: Your changes will take into affect after you run Start-InformationBarrierPoliciesApplication cmdlet.
Start-InformationBarrierPoliciesApplication cmdlet only applies Active state policies.
```

#### 2 Possible approaches

- SegmentsBlocked parameter
   Explicitly block 2 segments from mutual communication (segments can talk to other segments)
- SegmentsAllowed parameter
   Explicitly allow communication between
   or more segments (segments cannot talk to other segments)



## Part 3 – Apply IB policies

```
PS C:\Users\algiombi\Documents\OneDrive\D<u>ocuments\AppData\Scripts> Start-InformationBarrierPoliciesApplication</u>
  RNING: It may take several hours for the application to finish. Please check the status using
   -InformationBarrierPoliciesApplicationStatus cmdlet. Execution of New/Set cmdlets will be prevented until start/sto
 is finished.
RunspaceId
                        : 6a1133f2-445e-4d39-95bf-03cd2deaa50b
Identity
                        : 26a96e60-e071-47ad-8fa3-2713d9a8eefb
CreatedBy
                        : Alessio Giombini
CancelledBy
                        : ExoApplyIBPolicyJob
ApplicationCreationTime : 09/14/2019 15:49:49
ApplicationEndTime
ApplicationStartTime
                        : 09/14/2019 15:49:49
TotalBatches
ProcessedBatches
                        : 0
PercentProgress
                        : 0
TotalRecipients
                        : 0
SuccessfulRecipients
                        : 0
FailedRecipients
                        : 0
FailureCategory
                        : None
Status
                        : NotStarted
IsValid
                        : True
ObjectState
                        : Unchanged
```

```
PS C:\Users\algiombi\Documents\OneDrive\Documents\AppData\Scripts> Get-InformationBarrierPoliciesApplicationStatus
                        : 924b69c5-c1d7-4f35-a41e-8c75061b3807
RunspaceId
Identity
                        : 26a96e60-e071-47ad-8fa3-2713d9a8eefb
CreatedBy
                        : Alessio Giombini
CancelledBy
                        : ExoApplyIBPolicyJob
ApplicationCreationTime : 09/14/2019 15:49:49
ApplicationEndTime
                        : 09/14/2019 16:07:45
ApplicationStartTime
                       : 09/14/2019 15:49:49
TotalBatches
 ProcessedBatches
                        : 1
PercentProgress
                        : 100
                        : 52
TotalRecipients
                       : 52
SuccessfulRecipients
FailedRecipients
                        : 0
FailureCategory
Status
                        : Completed
Isvalid
ObjectState
                        : Unchanged
```

- 1. Use Get-InformationBarrierPolicy to see a list of defined policies. Note the status and identity (GUID) of each policy.
- 2. Use Set-InformationBarrierPolicy with an Identity parameter, and the State parameter set to Active to enable IB policies
- 3. When ready use Start-InformationBarrierPoliciesApplic ation to apply

#### 4. BE PATIENT! ;-)

- 1. After approximately 30 mins, policies are applied, user by user, for your organization.
- 2. For large organizations may take 24 hours (or more) to complete.
- 3. Rule of thumb: it takes about an hour to process 5,000 user accounts.



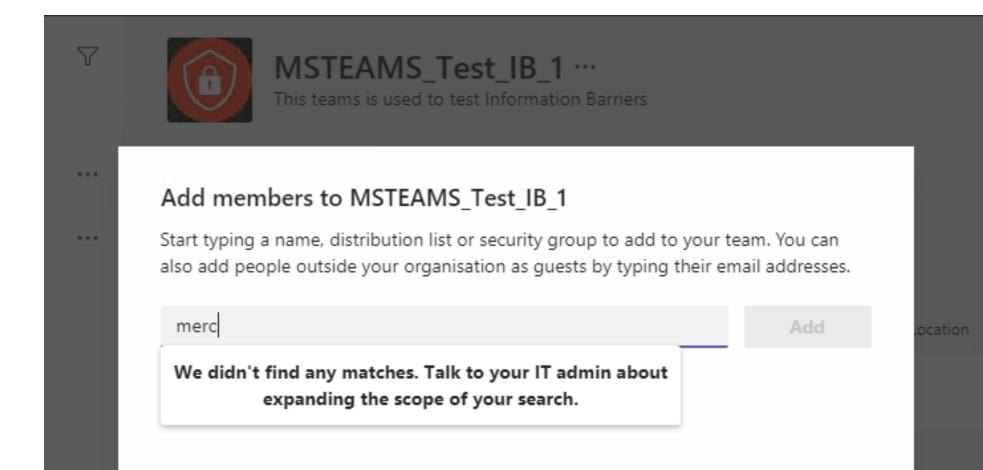
## Part 3 – Apply IB policies...too fast

```
PS C:\Users\algiombi\Documents\OneDrive\Documents\AppData\Scripts> Start-InformationBarrierPoliciesApplication
```



# User experience

Segmented user trying to add a user from another (blocked) segment in a Team

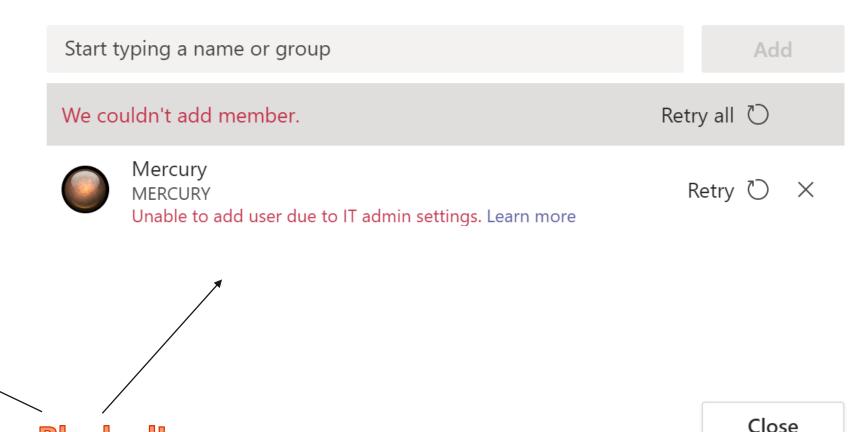


Non-segmented user trying to add a user from a segment in a Team where there are already users from another segment which is blocked for the user you're trying to add

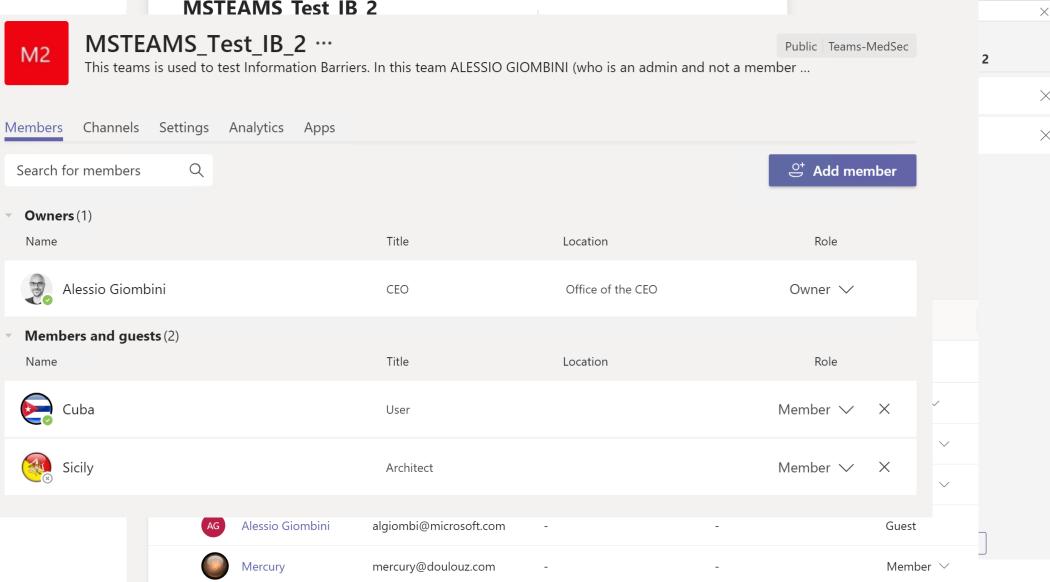
- Islands and Planets are mutually blocked segments
- Islands users already present in the Team
- Admin tries to add Mercury (*Planet*) in the Team

#### Add members to MSTEAMS\_Test\_IB\_2

Start typing a name, distribution list or security group to add to your team. You can also add people outside your organisation as guests by typing their email addresses.







Current experience	Improved experience (coming soon)
<b>People tab</b> - A user may see some blocked users on the <b>People</b> tab. The user can select the blocked users.	People tab - A user cannot see blocked users on the People tab.
Activity tab - If a user visits the Activity tab of a blocked user, no posts will appear. (The Activity tab displays channel posts only, and there would be no common channels between the two users.)	
Org charts - If a user accesses an org chart on which a blocked user appears, the user will see the blocked user on the chart and can click actions on the chart, but the actions (such as calling) will not go through.	Org charts - If a user accesses an org chart on which a blocked user appears, the blocked user will not appear on the org chart and an error message will appear instead.
<b>People card</b> - If a user participates in a conversation and is subsequently blocked, other users can still see the people card for the blocked user. All actions listed on the card (such as calling and chat) will be available, but the actions will not go through.	<b>People card</b> - If a user participates in a conversation and the user is subsequently blocked, other users will see an error message instead of the people card when they hover over the blocked user's name. Actions listed on the card (such as calling and chat) will be unavailable.
<b>Suggested contacts</b> - On the suggested contacts list (the initial contact list that appears for new users), users can see all suggested contacts (including blocked users). However, if a user clicks the name of a blocked user to open the Chats pane, the message will be blocked.	<b>Suggested contacts</b> - Blocked users do not appear on the suggested contacts list (the initial contact list that appears for new users).
Chat contacts - A user can see blocked users on the chat contact list.	Chat contacts - A user cannot see blocked users on the chat contact list.
Calls contacts - A user can see blocked users on the calls contact list and actions such as calling and messaging will appear, but when the user tries to call or send a message to the blocked user, the call or message will not go through.	Calls contacts - A user can see blocked users on the calls contact list, but the blocked users will be identified and the only action the user can perform is to delete them.
<b>Skype to Teams migration</b> - During a Skype for Business to Teams migration, all users, even those blocked by information barrier policies, will be migrated to Teams and then will be handled as described above.	



# Codice Mattina 2/5 ZL

# Supervision Policies

#### 1. Learn

You learn about the solution, we learn about you

Agenda

#### 2. Plan

Make informed decisions that influence the design

## 3. Deploy

Decide how we're going to complete the work

4. User experience

- 1. What are Supervision Policies
- 2. Use cases and scenarios
- 3. When/who and requirements

1. Planning key concepts

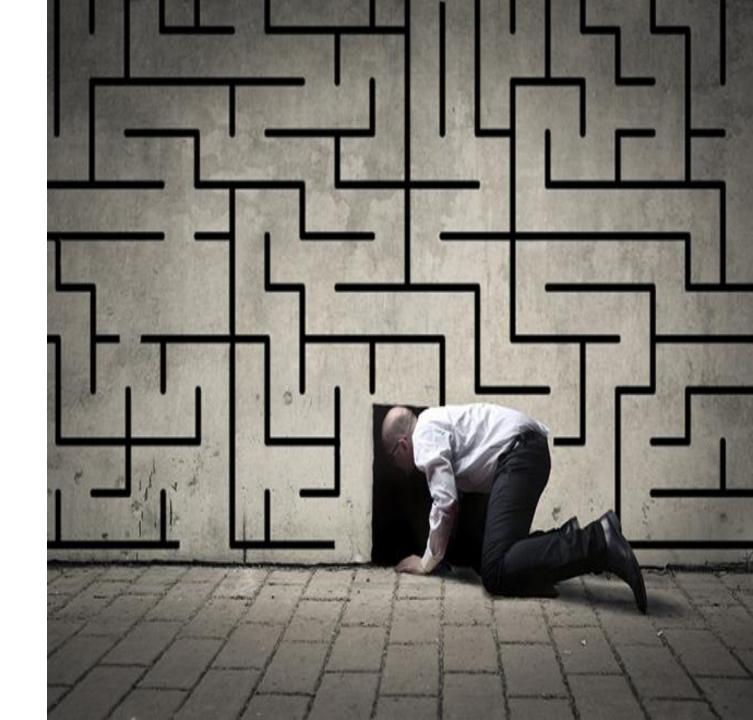
1. SP deployment workflow

1. Demo

# Learn SP

Supervision Policies allow to capture employee communications for review/examination by designated reviewers

Do not confuse with DLP



#### Supervision Policies - Scenarios



## Address Modern Workplace compliance challenges:

- Increasing types of communication channels
- Increasing volume of data
- Regulatory enforcement and risk of fines
- Support Corporate policies
  - Ethical standards
  - Acceptable Use
  - Harassment
- Risk Management
- Regulatory compliance

#### What you should know about SP

### **Functional**

Known gotchas and limitations

- Retained for 7 years by default
- Retained even when related mailboxes are deleted
- Supervise offensive/harassing language via ML/Al
- Supervise via existing/custom Sensitive Information types
- Supervise via custom keywords (100K per dictionary)

#### Exchange Online including supported attachments (instantly)

- Microsoft Teams
  - 1:1/Private/Group chats (processed every 24 hrs)
  - Channel conversations (processed every 24 hrs)
  - Files
- Skype for Business Online (processed every 24 hrs)
- 3<sup>rd</sup> party sources (e.g. Facebook, DropBox)
- Microsoft 365 E5
- Office 365 E5
- Office 365 Advanced Compliance
- Microsoft 365 E5 Information Protection and Compliance



License requirements What licenses do you need?

Who creates/edit SP policies?

To define or edit SP policies you need the following access level:

- ✓ Microsoft 365 global administrator
- ✓ Office 365 global administrator
- ✓ Compliance administrator

You also need to define:

✓ Supervisory Review role



## Plan SP

## **SP Building Blocks**

- Supervision Policies
  - Sensitive information types (new or pre-defined)
  - Offensive language (use a mix of Al/ML/Keywords) English only
    - Profanity
    - Slurs
    - Taunts
    - Disguised expressions
  - Custom dictionary (up to 100K words per dictionary) single policy can use multiple dictionaries
- Supervised users
- Reviewers
- Direction
- Conditional settings
- Supervision policy dashboard
- Reports
- Audits

# Deploy SP

## SP workflow

Make sure prerequisites are met

Part 1 (optional)
Set up groups for
Supervision

Part 2: Enable supervision in the organisation

Part 3: (optional)
create custom
sensitive
information types
and/or
dictionaries

Part 4: Create supervision policy

(As needed)
Test/Troubleshoot
a policy

## SP workflow – Set up groups for supervision

Use Groups to facilitate management and lifecycle of supervised user.
Supported Groups:

- Supervised user: DG or O365 group (no Dynamic DG)
- Reviewers: Mail-enabled SG (no DG or Dynamic DG)

Create dedicated DGs for your global SP and use these properties:

- **MemberDepartRestriction = Closed**. Ensures that users cannot remove themselves from the distribution group.
- **MemberJoinRestriction = Closed**. Ensures that users cannot add themselves to the distribution group.
- **ModerationEnabled** = **True**. Ensures that all messages sent to this group are subject to approval and that the group is not being used to communicate outside of the supervision policy configuration.

Use PowerShell to configure a DG

 New-DistributionGroup -Name <your group name> -Alias <your group alias> -MemberDepartRestriction 'Closed' -MemberJoinRestriction 'Closed' -ModerationEnabled \$true

Select an unused EXO custom attribute to track users added to the supervision policy in the organisation.

Run a PowerShell script on a recurring schedule to add users to the supervision policy

# User experience



# Q&A

