Grouper and Exchange/0365

October 2015

Background: Exchange/Office365 at CU-Boulder

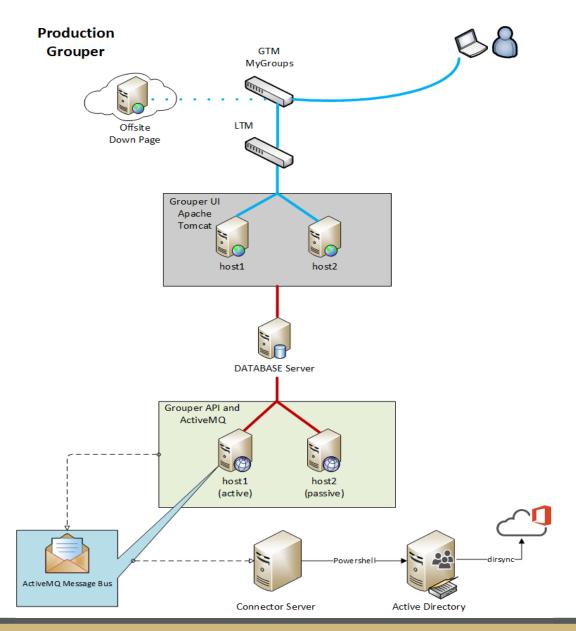
- Migrated to O365 from on-premise Exchange 2007.
- Capacity issues with on-premise Exchange
- Started targeted migrations of users Winter 2013
- Dirsync is used to sync information from AD to O365
- IAM was approached for a solution that would allow the management of mail-enabled groups on O365
- As far as the AD, IAM manages the DCs and the top level OU structure. Departmental Admins have full control over their AD OUs. Messaging Team manages the mail-enabled groups
- Distribution lists are used as security and access groups and vice versa

Background: Grouper at CU-Boulder

- Started looking into Grouper Fall 2013
- "Serious" product research as of Summer 2014
- Design discussions with other schools at and after Tech Exchange 2014
- Listened in on Grouper Developers Design Calls
- Opted for a message bus design over PSP
- Gathered business requirements and built out a dev environment (Fall 2014)

Challenges

- Bring up a production enterprise-wide solution ASAP
- Complexity of the AD environment
- Couldn't use our existing IDM system
- Resources availability and projects' priorities
- "Coding by Fire"



Approach

- Created and provisioned a permanent unique
 ID. Limitations with our uid and uuid
- Created a "Managed" group type in Grouper.
- For AD, created a new top level "Managed Groups" OU for groups managed by Grouper
- Developed processes and code for existing groups bulk migrations and for new group creation

Approach

- Initial bulk migration
 - MOVED mail enabled groups in AD to new OU
 - Turned off message bus and connector processing
 - Developed scripts to recreate groups in Grouper
- Post bulk migration
 - Create/Update groups in Grouper
 - Code consumes changes from the message bus and updates the AD

Issues and Lessons Learned

- Group membership flattening issues
- Initial Include/Exclude added complexity
- Timing issues with processing from the message bus
- Should have been given more time for development and testing.

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