

DEPLOYING MICROSOFT 365

UNIVERSITY OF VICTORIA

Paul Hilchey, Senior Identity Analyst

Adam Gaudes, Senior Technical Analyst

ABOUT THE UNIVERSITY OF VICTORIA

- ▶ Located in Victoria, BC, Canada
- ▶ 6,000 employees
- ▶ 21,000 students
- ▶ 125,000 alumni

SETTING

- ▶ Ellucean Banner student system
- ▶ IdentityIQ for provisioning
- ▶ Extensive use of on-premise Active Directory and Exchange; limited use of Skype For Business
- ▶ No use of Microsoft 365, but awareness that it was likely in our future
- ▶ Working from home not part of institutional culture

EARLY MARCH, 2020

- ▶ Several IT staff members attended week-long training on Microsoft 365
- ▶ Thinking at the time was to spend 2020 investigating Microsoft 365, then maybe deploy in 2021 (the university is not know for moving rapidly)

LATE MARCH, 2020

- ▶ Decision made to move almost all instruction on-line for the remainder of the calendar year.
- ▶ Decision made to have staff work from home.

GOALS

- ▶ Self-service provisioning of M365 accounts for faculty, staff, and students
- ▶ Automated provisioning of a Team for each course
- ▶ Be ready for September

CHALLENGES

- ▶ Microsoft does not guarantee where data will be stored, but we have a regulator requirement to gain consent before storing student data outside the country.
- ▶ UVic leadership apprehensive to provide students the capacity to send chat messages to faculty/staff through Teams

USER CREATION REQUIREMENTS

- ▶ User driven self-sign up process, including providing informed consent to terms of service.
- ▶ Assignment of Student vs Faculty licenses and seamlessly re-assign licenses on role change.
- ▶ Cannot nest groups in groups in Azure AD (yet)

TEAMS POLICY ASSIGNMENT

- ▶ MS Teams has feature called 'Policies', permitting administrators to configure different teams experiences for users.
- ▶ Teams policies assigned to users via Teams Admin GUI, or CSONline (SkypeForBusiness) Powershell.
- ▶ Created custom team policy sets for student and employees for
 - ▶ Messaging, Meeting, Teams, Calling

TEAM CREATION REQUIREMENTS

- ▶ Teams need to be created for every course and course section.
- ▶ Uniform Team naming convention.
- ▶ Teams provisioned with Microsoft's "class style" template
- ▶ Team members and owners need to be dynamic and update regularly with course registration and instructor changes.

PLAN

- ▶ Create development M365 tenant and manually provision IT staff so that we could start using Teams to collaborate
- ▶ Upgrade IdentityIQ from 7.2 to 8.1 to get the Azure AD connector
- ▶ Configure IdentityIQ to provision M365 accounts
- ▶ Configure IdentityIQ to provision Teams
- ▶ Build web application for sign-up.

PROVISIONING M365 WITH IDENTITYIQ AND AAD SYNC

- ▶ Microsoft provides “AAD Sync” tool to synchronize on-premise Active Directory to Azure Active Directory. This presents a choice: provision from IdentityIQ to on-premise AD and then sync to AAD, or provision from IIQ directly to Azure AD.
- ▶ For some items, there is no choice. For example: synchronizing address book entries can’t be done by IIQ; AADSync must be used.
- ▶ For others, such as creating Office groups, AAD Sync can’t do that; IIQ must provision directly.
- ▶ Where there is a choice, our preference is to provision directly from IIQ to AAD. Our view is that the on-premise AD has a limited future and it is best to avoid building new dependencies on it.

IDENTITYIQ CONFIGURATION

- ▶ Modelled Banner as 5 applications within IdentityIQ:
 - ▶ general person
 - ▶ employee
 - ▶ student
 - ▶ instructor
 - ▶ admin access
- ▶ Each application uses the standard JDBC connector and a database view on the relevant base tables in the Banner database

IDENTITYIQ CONFIGURATION

- ▶ Life-cycle trigger looks for student changes:
 - ▶ register or drop a course
 - ▶ new M365 account
- ▶ Launches "student provisioning" workflow that adds or removes membership in Team groups
- ▶ Workflow will schedule a request to retry in 24 hours if it is unable to complete the provisioning.

IDENTITYIQ CONFIGURATION

- ▶ Lifecycle event looks for changes in instructor assignments:
 - ▶ instructor added or removed from a course
 - ▶ instructor creates new M365 account
- ▶ Launches "instructor provisioning" workflow that adds or removes the instructor as the owner of the Team

IDENTITY CONFIGURATION

- ▶ Lifecycle event for role changes (student <-> employee <-> none)
- ▶ Launches provisioning workflow that updates license assignment and Teams policy assignments

IDENTITYIQ CONFIGURATION

- ▶ Team creation is handled by a scheduled task in IdentityIQ:
 - ▶ queries Banner database for all courses in the current or future term
 - ▶ compares with managed attribute
 - ▶ create Team if no corresponding managed attribute
 - ▶ update Team if name or description doesn't match
- ▶ task runs hourly as there may be new course sections defined shortly before the start of term

DEMO

OTHER CHALLENGES

- ▶ Instructors can change the names of the Teams they own. This presented some issues for support staff, who would then have difficulty locating the Team for a course.
- ▶ The Team creation process was enhanced to reset course Teams back to the standard naming convention.

OUTCOME

- ▶ IT staff pulled together to automate Microsoft 365 provisioning in time for the fall term.
- ▶ ~8,000 teams provisioned for the 2020/2021 academic year's courses.
- ▶ 14,500 users provisioned by October 2020
- ▶ In the month of October 630,000 chat messages sent, 83,000 channel posts/replies made.

FUTURE

- ▶ The Powershell cmdlet for creating Teams works 98% of the time. The other 2%, the group and Sharepoint site are created but not the Team.

We are planning to upgrade to IdentityIQ 8.1 patch 1, which has enhancements to the Azure AD connector that will allow us to automated cleaning up failed Team creations and retry.

- ▶ Team archiving and deletion workflows yet to be created. Leadership still deciding retention policies for course materials.
- ▶ Develop capacity through IdentityIQ to assign unique user groups teams policies sets for niche use-cases.