WIKISPHERE WHITEPAPER

Requirements for Collaboration Platforms

SIEMENS

The comparison has been created to our best of knowledge from Oktober 2020 to February 2021. Therefore, content may become outdated because of updates in MS Teams etc. If you find any errors or technical misunderstandings, feel free to comment directly in the page or send us an E-mail to the Wikisphere address.

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File based collaboration is not web-based collaboration

In some cases, uploading and downloading files and working with them offline is the only option. But in many social collaborations, the ideal would be to do everything — such as writing, revising, commenting, and editing — within a browser
(David F Carr, Author of Social Collaboration for Dummies).

There are certain cases where you would prefer work with (MS Office) files, e.g. if you need classical offline capabilities of content or the special capabilities of Excel or Powerpoint etc..

On the other hand, with web-based collaboration you will rarely hear the following sentences:

- "Is this the current version?"

- "Is this the *filename_date_final_final.doc* version?"

- I cannot edit the document, it is locked"

- "I will consolidate this later"

- "Did you turn on '*track changes*'?"

In the following we focus on the main aspects of web-based collaboration in the Wikisphere (Atlassian Confluence plus some Siemens specific extensions) and MS Office 365 wiki-like functionalities (Sharepoint Site Pages / MS Teams Wiki & Notebooks).

Short glossary of approaches as used by Microsoft (as part of Office 365)

- MS Teams **Meeting Notes**
  (1 page only, transient information only for the current meeting)

- **MS Teams Wiki** (Wiki app)

- **MS Teams Notebooks** (OneNote App)

- **MS Sharepoint Online** Collaboration **Site Pages** (incl. "web parts", "Wiki") - *not the Wiki Page Library app, as it does not integrate with the Web experience of a Site. We also do not consider the outdated "Enterprise Wiki Site" template which has to be enabled on site collection level.*
  Using a **Collaboration Site** *instead is recommended by Microsoft itself.*

Six questions to ask

Reflect these questions and aspects to compare solutions or platforms you are going to choose. We have been focusing on wiki-like, content-centric collaboration functionalities.

1) How much content do we want to maintain?

This is not simply a question of how much content you *can* create - all compared systems have no upper limit here - but whether the created content can be *handled* later on in a suitable manner (e.g. maintained by editors, found by users).

Confluence has clearly its strengths when it comes to 20 pages and more. In MS O365 you can experience wiki-like collaboration either with the Teams "wiki" functionality up to ca. 20 pages and Teams Notebooks up to ca. 70 pages. However, richness and usability of functionality is not consistent across these "apps", e.g. @ mentioning users.

Large collection of pages work pretty smoothly in Confluence up to hundreds or even thousands of pages. If you want to implement this in MS O365, you have to use (Collaboration) Site Pages and follow a content management editing approach, e.g. creating contents in "boxes" (similar to classic DTP design).

2) What design and layout options and what rich content options do we need?

Layout Templates

Both Confluence and Sharepoint Online offer several column layout patterns. In Sharepoint, you have to select a web part to start editing content; customization is limited to actions delivered by web parts. MS Teams (Meeting Notes, Wiki, Notebook) has only a fixed one-column layout.

Custom Content Templates

In Confluence any page can serve as a template. This usually works well for 90% of the use cases. In addition, in hosted spaces, space templates can be used for even more convenience.
In Sharepoint there is a similar approach using content pages as templates.

Images, Videos, Special Content, Automation

In Confluence one can insert images by clipboard, drag & drop and by simply linking to them.
In Teams Wiki you can paste via clipboard.
In Teams Notebooks it works via clipboard and drag & drop.
In Sharepoint Online you can paste via clipboard and use drag & drop.

Both, Confluence and Sharepoint offer special frames to embed videos, partly automatically converting video links. The latter is also the case for Teams Notebooks, but not for Teams Wiki.

In Confluence there is a variety of macros for automation while in Sharepoint you would add web parts as content sections. Special content in the Wikisphere refers to Yammer streams, diagrams, LaTeX formulas, extended tables etc. MS Teams Notebook allows adding maths formulas and basic diagrams. Adding apps in MS Teams creates new tabs (i.e. they don't integrate into the content like Confluence macros or Sharepoint web parts).

3) How can we find relevant content?

Searching and Finding

Sharepoint Online per default has a site-wide search with some time ranges as additional filters. Search results appear as you type for page titles only. Results in page content are shown after pressing ENTER (full text search).

There is no overall search for MS Teams team contents. The top search slot searches messages, people and files. It does not search any other tabs (apps), e.g. not Notebooks, Wiki etc. If an app has an own search (like Notebooks), contents can be searched; if not (like Wiki), then not. In OneNote Desktop App, a full-text search is available over the whole Notebook.

Confluence offers a high performance search on full text and a variety of filter facets out of the box (spaces, labels, time frame, content types, subtree).

Navigation structures to explore context

Maintenance and flexibility (one structure / multi perspective)

Sharepoint Online per default has a primarily flat vertical navigation bar (Quick Launch). It can be hierarchically extended and maintained manually. Out of the cloud there is no breadcrumb navigation.

MS Teams Notebook has two main levels of navigation; first column: Section (Abschnitt), second column: Page (Seite). Pages can have two level of Subpages. MS Teams Wiki has a flat hierarchy; subheadings in a Wiki page are displayed in the navigation.

In Confluence pages are contained in spaces and structured in a hierarchy with arbitrary depth. In the open corporate spaces of the Wikisphere, pages can be organized in Topic Portals (optionally flat or hierarchical). The page structure can be easily rearranged with drag&drop and move operations. The page structure is updated automatically and shown in the breadcrumb navigation and provides quick access to the ancestor levels and its child pages.

Tags and automatic lists of pages

In Sharepoint Online, there is no tagging available per default for site pages. One can extend page metadata in a customization process using a separate power app called Power Apps Studio. There is a web part to flexibly include "lists" of related content in page.

MS Teams has no tagging in Notebook or Wiki. If you open MS Teams files in Sharepoint, metadata can be added to files, by which they can then be listed/filtered.

In Confluence labels (tags) can be assigned to all pages and attachments (existing labels are suggested as you type). Many macros support label filtering options (incl. label combinations) to create dynamic content lists. Labels are also used to improve, weight and filter search results.

4) How can we keep oversight and collaborate intensively in our team?

Activity streams to follow updates

In Sharepoint Online, a (Site) Activity web part offers a customizable number of tiles in a fixed layout. There are no filters or customizations available. Currently there are no personalized filter option available on Sharepoint entry and Office 365 entry. In Office 365 there are different lists of edited documents.

In MS Teams, the only activity stream is the "Posts" conversation tab. For this, information must be added actively to the conversation (no automatic posts upon creation e.g.). There is no possibility to watch contents or receive e-mail notifications aside of the "Posts" / conversation tab if @mentioned. Only when opening MS Teams in Sharepoint, you can set "Alert me" options for all "pages" / files and and be informed by e-mail.

When opening MS Teams Notebook in the OneNote Desktop app, "Recent edits" are available.

Confluence: Personalized content on Dashboard: "Recently worked on", "Recently visited", "Saved for later" (bookmarks), "Recently visited" in search box and while editing/inserting links. Recently updated on each space and Topic Portal. Watch / follow pages, Topic Portals and spaces to get e-mail notifications on changes. Users can be @mentioned and get notified by e-mail. Authors and change dates are transparent on all content. User profile pages show recent activity, topics (tags), "About me" and contact data of users.

Concurrent editing and versioning

Sharepoint Online does **not** offer concurrent editing on site pages. Only one user can edit at a time. Versions of pages are preserved and can be compared as well as restored.

MS Teams Notebooks has very weak concurrent editing in shared notebooks (conflicts might happen and cannot be merged automatically - you need to restore the latest stable version, which might take several tries). Versioning is available and old versions can be restored (though the versioning moment is unclear, as the entries autosave).

MS Teams Wiki has no real concurrent editing (section editing is locked; changes of others in other sections cannot be seen until the tab is left and returned to). There is no version history available to end users.

Confluence's collaborative editing lets a team work together in real time on pages. Everybody sees who's editing the page with you, and the changes as they happen. Confluence tracks the history of changes to each page by creating a new version of the page each time it's modified. Changes between different versions can be viewed and rolled back to a previous version if needed.

Commenting

In Sharepoint Online, there are comments on page level but no inline comments on word level and no resolve workflow for the latter. @mentioning works in page comments.

In MS Teams Notebooks, comments can be added. In MS Teams Wiki, comments can be added per section (not page). All comments appear on the tab "Posts". There is no resolve workflow.

In Confluence, comments can be added at the bottom of any page, or as an inline comment by highlighting specific text on the page. Inline comments can be

resolved once the conversation is finished. Page and inline comments support rich text (like bold, underline, and italics), bulleted and numbered lists, links, @mentions, and images.

Notifications and @mentions

In Sharepoint Online pages' content, there are no notifications based on @mentions.

In MS Teams Notebooks, comments can be addressed to collaborators via @mentions. In MS Teams Wiki, it is possible to use @mentions directly in the text, or in comments. Notifications can be turned on for entries in the "Posts" tab, e.g. conversations or comments. Notifications can also be set on Channel level.

In Confluence users can watch / follow single pages and entire spaces and Topic Portals to get notified on changes by e-mail. In any kind of content (pages, comments, inline comments) @mentions can be used to draw someone's attention to a page or comment. When you mention a user, they'll receive a notification by email.

5) How easily can we publish for a larger audience?

Permissions

Sharepoint Online Sites can be opened up for any users who request membership in a (permission) group related to your site. Requests can be "auto-accepted", so anyone can join. The permission system is quite complex.

In MS Teams, users always need to join to access anything (exceptions: files in the underlying Sharepoint); the three base roles are owner, member and guest.
Further access rights can be managed on team and channel level.
Basic settings: A team can be "Private" or "Public (everyone in your organization can join)". Extended settings are available via "Manage teams" - Permissions, team code etc.
In a channel of a "Public" team: c hannel moderation can be on/off, and it can be defined who can start a new post: " Everyone can start a new post" or "Everyone except guests can start a new post". In a channel of a "Private" team, more complex permission settings can be defined.

In Confluence permissions are mainly related to spaces. Any space can be opened for groups, individual users or the whole company without an additional "join" step. In the Wikisphere you can start creating content immediately in the three company spaces (English, German, more). They are open by default, and all employees can view and edit.

Analytics on content creation and traffic

Sharepoint Online reports on views, likes and comments on single pages. It offers a reporting page on site level about viewers, visits and time spent on pages, posts and documents for three fixed time frames.

MS Teams offers analytics per team and/or channel, and the channel analytics can also be opened from each channel. Available are number of users and channels, as well as "Engagement" (posts, replies, mentions, reactions).

Confluence: The Wikisphere is tracked with Adobe Analytics, which allows state-of-the-art insights. Custom content and traffic statistics are available to all users on page, Topic Portal and Space level. Breakdowns include traffic by org-unit, country, and different time series (views, creation and update activity). Most viewed pages and most liked content are displayed for Topic Portals and spaces.

6) How easily and robust can we reorganize content?

Moving pages

In Sharepoint Online you cannot move or copy site pages to other (sub)sites. The underlying list of pages ist flat. Refactoring of content has to be done with additional external tools.

In MS Team, content "moves" between tabs (apps) can only be done via copy&paste of the content, as all apps are basically stand-alone implementations. In MS Teams Notebook, sections can be sorted by drag&drop. Pages can be sorted by drag&drop within a section, and pages can also be copied/moved to other sections (but will lose version history and conflicts when moved). MS Teams Wiki pages can be sorted in the list by drag&drop, and the sections can also be sorted by drag&drop and are auto-numbered.

In Confluence, pages and sub-trees can be moved to an arbitrary location in the page hierarchy (drag&drop available) and to other spaces (without breaking hyper-links).

Consistency of Links

Sharepoint Online keeps links somehow working, even if you rename pages in their list view. Usually links to pages stick with their title given at creation. There are no permanent short links offered to readers.

MS Teams Notebooks and Wiki have (non-human-readable) links that still work after moving contents within each tab/app.

In Confluence, links to pages are relative, which means that pages can be moved and renamed without breaking links.

Creating Links

Sharepoint Online supports linking between site pages but only offers link support for pages in the same site.

In MS Teams, a link is available for most content. As all tabs are basically independent apps, the linking between apps loses the Teams context and behaves strangely (e.g. leaves MS Teams and opens the Browser/Desktop app OneNote for a link from MS Teams Wiki to MS Teams Notebooks).

In Confluence, links to pages, anchors, attachments and external websites can be added in many different convenient ways. An insert link dialog includes a search functionality, and provides direct access to recently viewed content and file attachments. Another way is to type [followed by the page or attachment name, where autocomplete will suggest matching items. When an URL is pasted directly onto a page, Confluence will automatically create the link, and if the URL is for a page in the current site, the page name will be set as the link text.

Comparing and restoring versions

Sharepoint offers a version history of pages that can be compared to the current version. There is a someway hidden feature to also compare two arbitrary versions.

Only MS Teams Notebook offers a versioning, which gets lost when pages are moved between sections. Tracking of reorganized content in MS Teams is therefore almost impossible.

In Confluence you can compare (and restore) arbitrary versions. Versions can be annotated with short (version) comments.

Content lock-in - Exports

MS Teams Wiki content cannot be printed or exported (e.g. to Word). MS Teams Notebook content cannot be exported from Teams, but can be opened in the Desktop app and exported from there.

Confluence offers export of single pages to Word and PDF, and export of trees/spaces to XML, HTML and PDF.

To export data from Sharepoint Online you have to rely on 3rd party tools or copy different elements (lists, libraries, etc.) to your local clients.

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