

SharePoint Server, Exchange, Lync, Office Web Apps – The Mobile Landscape

Apps and browser-based experiences

This section below covers a selection of device apps and browser-based experiences for SharePoint 2013, Exchange 2013, and Lync 2013. It is important to note that not all apps and browser-based experiences are available for both form factors (phone and tablet), and not all experiences will work in both on-premises or Office 365 environments. Support specifics will be provided for each app and browser-based scenario.

SharePoint

This selection of apps and browser-based experiences is available for SharePoint Server 2013.

Contemporary View (Browser-based)

- HTML5-based browser view activated by default on select site templates (Team Site, Blank Site, Document Workspace, Document Center, and Project Site)
- Offers enhanced features like Menu Button, Navigation Window, Tap-to-open links and Pagination.
- Standard features – little to no configuration or customization needed
- Available for supported phone mobile browsers on SharePoint Server (2013 only) or SharePoint Online

SharePoint Newsfeed App

- The new social experience available on your mobile device(s) via downloadable apps
- Post to newsfeeds on all your SharePoint sites, follow people, @mentions, documents, #hashtags, and more.
- Available for either SharePoint Server 2013 (Windows 8, iOS) or SharePoint Online (Windows Phone, Windows 8, and Apple iOS).

Device Channels (Browser-based)

- With device channels feature in SharePoint 2013, you can render a single publishing site in multiple ways by using different designs that target different devices.
- Device channels are available only for SharePoint 2013 publishing sites.
- You can have a maximum of 10 device channels including the default configured on a specific site for an on-premises installation, and a total of two device channels when using SharePoint Online.

Exchange

This selection of device mail options is available for Exchange 2013. Note: There are several device experiences, both app and browser, for accessing Exchange on-premises or Office 365 mail. This section highlights a couple of methods and is not intended to be an exhaustive list.

Outlook Mobile on Windows Phone (Default-adding Exchange account to mail settings)

- Sort, scan, and respond to email
- You can choose to see multiple accounts from several different mail providers
- Group by conversation and flag messages
- Available on Windows Phone 7.5 and Windows Phone 8 devices

Outlook Web App/OWA (Browser-based)

- Sort, scan, and respond to email
- Available on Windows Phone, iPhone and iPad
- Requires a subscription to Office 365 with Exchange Online
- Also, for an app alternative, OWA for iPhone and OWA for iPad bring a native Outlook Web App experience to iOS devices. They can be installed from the Apple App Store and require a subscription to Office 365.

OneDrive for Business

OneDrive for Business is cloud storage that your organization can use for employees as part of SharePoint 2013 on-premises and/or Office 365 SharePoint Online deployments. Mobile apps are available for Windows Phone, Windows 8, and iOS devices, and Android through options like marketplace apps and Office Mobile.

Some capabilities:

- View documents in your OneDrive for Business folder
- Select specific content to take offline when you travel
- Upload new content
- Create new folders and organize

Lync

Lync Mobile 2013 (App)

- Lync 2013 is a communication app that provides enhanced presence, IM, Lync meetings, and voice and video calls over the Internet or the cellular connection.
- Instant Messaging functionality includes participating in single or multiparty sessions, navigating among multiple IM sessions, and sending conversations as an email message.
- Available on Windows Phone, Windows 8, iPhone, iPad, and Android.

This app is available for Lync 2013.

Office on Mobile Devices

- Office Mobile on your phone is the place to go to work on your Microsoft Office documents. Get to Office documents that are on your device or saved somewhere else, such as on Microsoft OneDrive, on a Microsoft SharePoint 2010 (or later) site, or on a SharePoint Online site. SharePoint Online is available with Microsoft Office 365.
- Open or find existing documents, or create a new one. Any documents you recently saved to your phone (from an email, for example) appear here as well.
- View, open, search, and edit your notes to keep track of what's going on at home, work, or school while you're on the go.
- Office Mobile is available on Windows Phone (built-in), iPhone, and Android. Note for iPhone and Android users: You must have a subscription to Office 365 to use this app.

Office Web Apps

Outside of using Office Mobile, users can view Office documents on mobile device browsers such as Windows 8 tablets, iPads, and phones. Office Web Apps is the online companion to Word, Excel, PowerPoint, and OneNote applications. Although Office Web Apps is available for multiple device browsers and manufacturers, viewing experiences can vary across devices. For example Windows 8 tablets and iPad provide editing capabilities, whereas phones can only view these apps. The illustration below shows the Office Web Apps experience on an iPad for Microsoft PowerPoint and Microsoft Excel. It is available for both on-premises and online deployments.

High Fidelity Viewing

- Word Web App – See graphics, images, and layout with excellent fidelity, including comments.
- PowerPoint Web App – View your presentations just as you would on your desktop, with high-resolution slides, full transitions, and viewable comments. You can also play back audio and video files right from your tablet or phone.
- Excel Web App – Change and visualize your data for deeper insights with high fidelity charts including 3D, improved Query Table and Data Validation support, Slicer functionality and Pivot Chart interactivity.

Edit in the Browser (Windows 8/iPad)

- Excel Web App – Get essential spreadsheet features through your browser, such as merge cells, context menus, auto-fit columns, formula assistance, fill handle and AutoSum. Print right from your browser, and rename or add sheets as you need.
- Word Web App – Edit, format and design your documents right from your browser with commonly used features and shortcuts you know from Word on your desktop.
- PowerPoint Web App – Edit text or drag and drop elements such as pictures or charts. You can insert images, add transitions and animations, or apply a pre-designed theme right from your browser.

Device Management and Software Distribution

Microsoft has new offerings for device management across multiple device brands. Windows Intune is a cloud-based management platform for mobile devices. It can either be used by itself to manage your devices, or coupled with System Center 2012 R2 Configuration Manager and administered within that console. Some benefits of joint operation include:

- Policy enforcement and management across multiple devices including Windows RT, Windows 8.1, Windows Phone 8, iOS, and Android
- Scale up to 100,000 devices in your organization
- Over-the-air device enrollment
- User targeting of applications
- Performing device inventory
- Remote device retirement and device wipe
- Management from a familiar Configuration Manager console.

- Using both System Center 2012 R2 Configuration Manager and Windows Intune you can manage and administer all devices in your organization under one console.
- To connect Configuration Manager to Windows Intune, you need a Windows Intune Subscription, and the Windows Intune Connector site server role must be deployed on a server in your Configuration Manager environment.
- Microsoft System Center 2012 R2 Configuration Manager provides management and software distribution for your on-premises PCs.
- Managed modern devices will receive policy enforcement and software distribution from Windows Intune. Supported types of devices include Windows RT, Windows 8.1, Windows Phone 8, iOS, Android

On premises and cloud-based mobile deployments

Note: The topologies represented here for SharePoint Server, Lync, and Exchange do not illustrate a preferred way for implementing these platforms. They merely provide an example, as topologies will differ based on unique network requirements and security considerations.

Internet	Intranet	Considerations
<p>1. Mobile Device (External) Accessing publishing site (IE: LyncDiscover.contoso.com)</p> <p>2. External Firewall</p> <p>3. Load balancer/Reverse Proxy</p> <p>4. Office Web Apps</p>	<p>3. SharePoint Web Front End Server, SharePoint App Server, SharePoint Database Server</p>	<ol style="list-style-type: none"> This topology shows an extranet deployment of SharePoint Server 2013. We recommend that devices connect securely to your SharePoint 2013 web front-end servers using an option like SSL or a VPN gateway. SharePoint can use TCP port 443 (SSL) for encrypted communication between the device and the reverse proxy. For external access from the Internet, this port needs to be opened for inbound and outbound traffic on any firewall or router. When a mobile browser accesses a site from the Web Front End Server, an http request is made to IIS. In the http request, the USERAGENT field contains information about the mobile browser making the request. This information can be used for browser redirection decisions for the out of the box Contemporary View, or a custom site implementation using the Device Channels feature. For SharePoint 2013, Office Web Apps has been decoupled from the installation and is now a standalone product. To provide client access to Office Web Apps, including mobile, you need to configure SharePoint 2013 to use your installation of Office Web Apps Server. You can do so with the following SharePoint 2013 Management Shell cmdlet: New-SPWOPIBinding -ServerName <ServerName>, where <ServerName> is the FQDN name of the URL that you set for the internal and external URLs.
<p>1. Mobile Device (External) Accessing publishing site (IE: LyncDiscover.contoso.com)</p> <p>2. External Firewall</p> <p>3. Load balancer/Reverse Proxy</p> <p>4. Exchange Client Access Server, Exchange Mailbox Server</p>	<p>3. Exchange Client Access Server, Exchange Mailbox Server</p>	<ol style="list-style-type: none"> A device connects to the on-premises Exchange Client Access Server that hosts applications such as Microsoft Exchange ActiveSync, the Outlook Web app, and provides the Exchange Autodiscover service. We recommend that you use SSL encryption between the external device and the Exchange Client Access Server. Device traffic like Exchange Auto Discover and Exchange ActiveSync is handled over port 443 (HTTPS). The Direct Push feature in Exchange 2013 keeps a mobile device current over a cellular or wireless network connection. It notifies the mobile device when new content is ready to be synchronized. It is important that all firewalls in your organization and carrier support a long-standing HTTPS request. By default Direct Push is configured to poll for any changes for 15 minutes in any folder and update the device. You may have to increase the time out value on a firewall if it falls beneath the default 15 minute Direct Push configuration. The Exchange Client Access Server (CAS) hosts the Exchange ActiveSync service. It allows you to synchronize data between your phone or tablet and Exchange 2013.
<p>1. Mobile Device (External) Accessing publishing site (IE: LyncDiscover.contoso.com)</p> <p>2. External Firewall</p> <p>3. Load balancer/Reverse Proxy</p> <p>4. Lync Front-End Pool</p> <p>5. Mobile Device (Internal) Accessing internal site (IE: LyncDiscoverInternal.com)</p> <p>6. DNS - Internal</p>	<p>3. Lync Front-End Pool</p>	<ol style="list-style-type: none"> For a general workflow, an external mobile device sends an HTTPS Get request to an example external Lync URL: LyncDiscover.contoso.com. The request is received by the reverse proxy server, which forwards the request over port 443 to a Front End Server (or server pool). The reverse proxy server must have a publishing rule for LyncDiscover.contoso.com. We also recommend that the firewall and the reverse proxy server be hosted on separate computers. On the Front End Server, the autodiscover service retrieves the Web service URLs for the user's home pool and returns that information to the mobile device by way of the reverse proxy server. The autodiscover service enables mobile devices to locate Lync Server Web services without requiring users to manually enter URLs. If a mobile device logs on inside the firewall, a HTTPS Get command is sent directly to the Lync Front End Pool such as LyncDiscoverInternal.com. The request is received on port 443, the same port that the autodiscover service uses to communicate back to the mobile device. You must configure two DNS records in order to support mobility: one for LyncDiscover.contoso.com and one for LyncDiscoverInternal.com. The external FQDN should be accessible only from outside the firewall, the internal FQDN should only be accessible from inside the firewall.
<p>1. Mobile Device (External) Accessing publishing site (IE: LyncDiscover.contoso.com)</p> <p>2. External Firewall</p> <p>3. Load balancer/Reverse Proxy</p> <p>4. Lync Front-End Pool</p> <p>5. Mobile Device (Internal) Accessing internal site (IE: LyncDiscoverInternal.com)</p> <p>6. DNS - Internal</p>	<p>3. Lync Front-End Pool</p>	<ol style="list-style-type: none"> Office 365 eliminates the need for an on-premises mobile infrastructure (hardware and software). It offers mostly the same features as the server-based suite for SharePoint 2013, Exchange 2013, Lync 2013, and Office Web Apps. Some other benefits include: <ul style="list-style-type: none"> Simpler authentication scheme for devices, a possible single sign-on (SSO) login experience for many scenarios. Similar device management infrastructure as an on-premises implementation including deployment of Exchange mailbox policies such as enforce PIN and device wipe. Also you can leverage device management solutions like Windows Intune as discussed in this poster. Microsoft Office Web Apps are a part of most Office 365 plans. Office Web Apps mobile viewers make it easier for you to work with documents in the cloud. Many of the app and browser-based experiences render similarly on devices using Office 365 as with an on-premises deployment. It should be noted that in certain cases there can be differences, both user interface and functionality.

Bringing social to devices – Yammer offers a premier social experience across multiple device platforms (Windows Phone, iOS, and Android). To learn more about mobility with Yammer, see <https://about.yammer.com/product/mobile>.

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