



TECHNOLOGY FUNCTIONS, SECURITY & ACCESS: A TOOL FOR JUDGES

These documents are designed to support the work of judges presiding over cases that involve technology. They describe the primary functions, security features and modes of access for popular online technologies that are broadly used in the United States as of October 2018.

Judges can use this tool to analyze information presented in a case, ask relevant questions, and determine what evidence may be available regarding specific technologies.

KEY



FUNCTIONS: Lists some of most common ways the technology is used. Keep in mind this is a summary, and *not every function is included*.



SECURITY, PRIVACY & SAFETY FEATURES: Lists the features help maintain account security, those that help users know if their account has been compromised, and how they can can access evidence about misuse.



ACCESS POINTS: Lists the devices that can be used to access the account or technology.



ACCESS KEYS: Lists the information needed to access the account, along with alternative options if the primary information isn't available (e.g. "I lost my password").



FACEBOOK is a social networking site where users can interact with each other in a variety of ways both publicly and privately. The information below highlights the most popular functions, the ways it can be accessed, and important security features (as of October 2018). For more information visit the Facebook Help Center at [facebook.com/help](https://www.facebook.com/help).



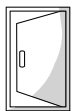
FUNCTIONS

- Focuses on status updates to 'friends' & 'followers'
- Post photos, videos, animated GIFs & links
- Comment on & react to others' posts
- Send private, disappearing & group messages
- Location sharing via direct message or posts
- Livestream video
- Use @ to link to other users in posts
- Use # to make post searchable by topic
- Create personal 'profiles'; create business, support group, & fan 'pages'
- Interact in virtual reality



SECURITY, PRIVACY & SAFETY FEATURES

- Must provide real name to create account
- 'Where You're Logged In' feature shows geolocation of current logins
- Email alerts when account accessed from unrecognized device
- Can approve / deny / remove friends
- User can log out remotely
- Optional 2-factor authentication
- Optional one-time password sent via SMS
- Limit who can see account info & posts
- Blocking & reporting options
- Can download all information on account



ACCESS POINTS

- Computer, phone or tablet via web browser
- Computer, phone or tablet via app
- Smart devices via app (watches, tv, etc.)
- Video game consoles via app
- Virtual reality devices via app



ACCESS KEYS

- Email address/phone number + password
- Optional:**
 - One-time password sent via SMS
 - 2-factor authentication via SMS or app
 - Recovery codes sent to trusted contacts
 - Recovery codes printed in advance



INSTAGRAM is a social networking site where users can interact by sharing photos, videos and GIFs both publicly and privately. The information below highlights the most popular functions, the ways it can be accessed, and important security features (as of October 2018). For more information visit the Instagram Help Center at help.instagram.com.



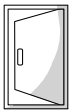
FUNCTIONS

- Focused on visual sharing
- Post photos, short videos & animated GIFs with optional captions
- Post time-limited (24hrs) photos, videos & animated GIFs to a secondary feed called 'Stories'
- Livestream video
- Use @ to link to other users in posts
- Use # to make post searchable by topic
- 'Follow' others
- Send group & private messages
- Comment on / react to others' posts
- Save others' posts to your 'Collection'



SECURITY, PRIVACY & SAFETY FEATURES

- Real name not required to create account
- Optional 2-factor authentication
- Option to make account private so that only followers can see posts
- Can approve / deny / remove followers
- Can turn off commenting
- 'Hide Offensive Comments' tool
- Blocking & reporting options
- Download all account information



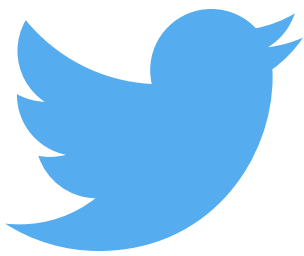
ACCESS POINTS

- Phone or tablet via app
- Limited use on computer via web browser (can't post or comment)
- Limited use on smart devices via 3rd party apps (watches, tv, etc.)



ACCESS KEYS

- Email address/Facebook account/username + password
- Optional:**
 - One-time password via SMS
 - 2-factor authentication via SMS or app
 - Recovery codes printed in advance



TWITTER is a social network and news site where users interact through short posts called Tweets. The information below highlights the most popular functions, the ways it can be accessed, and important security features (as of October 2018). For more information visit the Twitter Help Center at help.twitter.com.



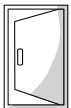
FUNCTIONS

- Focused on posts (Tweets) limited to 280 characters for fast sharing & consumption
- Post photos, videos, animated GIFs & links
- Livestream video
- 'Follow' others
- Use @ to link to other users in posts
- Use # to make post searchable by topic
- Retweet or comment on others' posts
- Send group & private messages



SECURITY, PRIVACY & SAFETY FEATURES

- Real name not required to create account
- Optional login verification via 2-factor authentication, backup code, or USB key
- Alert when account accessed via new device
- Alert when email address associated with account is changed
- Download all account information
- Option to make account private so that only followers can see posts
- Can approve / deny / remove followers
- Can turn off commenting
- 'Hide Offensive Comments' tool
- Blocking & reporting options



ACCESS POINTS

- Computer, phone or tablet via web browser
- Computer, phone or tablet via app
- Smart devices via app (watches, tv, etc.)
- Video game consoles via app
- Augmented & virtual reality via 3rd party app



ACCESS KEYS

- Email address/username + password
- Optional:**
 - 2-factor authentication via SMS or app
 - Printable backup code
 - Recovery codes printed in advance
 - USB security key



SNAPCHAT is a social networking app where users interact by sharing photos, short videos and GIFs that disappear. The information below highlights the most popular functions, the ways it can be accessed, and important security features (as of October 2018). For more information visit the Snapchat Help Center at support.snapchat.com.



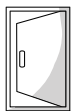
FUNCTIONS

- Focused on communicating through disappearing photos, videos & animated GIFs
- Modify images with augmented reality filters
- Live video chat
- Location sharing via Snap Map
- Send group & private messages
- Direct messages (Snaps) are set to disappear either immediately or 24 hours after being read by the recipient
- Post photos & videos to 'My Story' - a timeline viewable by friends and set to erase after 24 hours



SECURITY, PRIVACY & SAFETY FEATURES

- Real name not required to create account
- Optional 2-factor authentication
- Blocking & ignoring options
- Remotely un-link account from device
- Download all account information
- Option to post publicly or privately
- Limit who can contact you, who can see your location, and who can see your Stories
- Notification if photos, videos, messages or posts are copied/saved/recorded
- Not required to give real name



ACCESS POINTS

- Phone or tablet via app
- Limited use on computers when used in combination with third party software



ACCESS KEYS

- Email address/username + password
- Optional:**
- 2-factor authentication via SMS or app
 - Recovery codes printed in advance



WHATSAPP is primarily a messaging app that can also be used to place voice or video calls. The information below highlights the most popular functions, the ways it can be accessed, and important security features (as of October 2018). For more information visit the WhatsApp Help Center at faq.whatsapp.com.



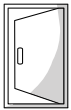
FUNCTIONS

- Focused on secure instant messaging
- Send group & private messages
- Voice & video calls
- Send photos, videos, & recordings
- Send files
- Share location
- All communications tied exclusively to phone number



SECURITY, PRIVACY & SAFETY FEATURES

- Real name not required to create account
- End-to-end encryption so that messaging and phone conversations cannot be intercepted by third parties
- Viewable security codes to ensure end-to-end encryption is activated
- 2-factor authentication
- Blocking & reporting options
- Limit who can see your status, profile photo & when you were last online
- Turn read receipts on or off



ACCESS POINTS

- Phone via app
- Computer web browser via phone generated QR code



ACCESS KEYS

- Phone + phone number

Optional:

- 2-factor authentication via SMS or app
- QR code generated by phone for computer browser access
- Change account phone number via current device



YOUTUBE is a video sharing website. The information below highlights the most popular functions, the ways it can be accessed, and important security features (as of October 2018). For more information visit the YouTube Help Center at support.google.com/youtube.



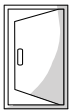
FUNCTIONS

- Focused on publishing & viewing videos
- Watch videos others have recorded
- Share videos that you find on the site through email, messaging & social media
- Create your own channel
- Can view videos without creating account or logging in
- Must log in to upload, like, dislike or comment on videos
- Can subscribe to other users' channels when logged in



SECURITY, PRIVACY & SAFETY FEATURES

- Real name not required to create account
- YouTube account = Google account
- myactivity.google.com to view activity & control what information is tracked
- myaccount.google.com/security to manage security settings, including what devices are logged in and accessing account
- 2-factor authentication
- Reporting & removal request options
- Privacy settings for videos, likes, & subscriptions
- Approve, report & delete comments
- Approve / remove friends
- Remove subscribers



ACCESS POINTS

- Computer, phone or tablet via web browser
- Computer, phone or tablet via app
- Smart devices via app (watches, tv, etc.)
- Video game consoles via app
- Virtual reality devices via app



ACCESS KEYS

- Email address/phone number + password
- Optional:**
 - Code sent to recovery email address + first&last name on account
 - 2-factor authentication via SMS, app, phone call, USB security key



ALEXA is a voice operated digital assistant that works in conjunction with smart devices. The information below highlights the most popular functions, the ways it can be accessed, and important security and privacy features (as of October 2018). For more information visit the Alexa Features Help Center at amzn.to/20pDTRx.



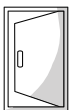
FUNCTIONS

- Focused on using voice commands, questions to access information & control compatible devices
- Use the Alexa app to access information & control compatible devices
- Control thermostat, appliances, television, lights, security camera, locks, etc.
- Use with a smart speaker to play music, audiobooks, podcasts, etc.
- Get weather, traffic, news updates, etc.
- Send messages, make calls, set alarms, manage lists, make purchases, display images, play videos, etc.
- Add 'skills' to increase usefulness



SECURITY, PRIVACY & SAFETY FEATURES

- Obtain dialog history transcript & recordings
- Blocking options for calling & messaging
- Manage smart device permissions
- Manage Alexa skill (commands) permissions
- Control functions with both voice or app
- Turn microphone on and off
- Change wake word
- Calling & messaging not automatic; must register first



ACCESS POINTS

- Phone or tablet via app
- Amazon Echo devices



ACCESS KEYS

- Email address/phone number + password
- App installed on authorized device