

Reading Room Laptop User Guide

How to Access Collections on the Reading Room Laptop	1
Finding Your Collection	1
Applications for Opening Collection Items	2
Customize Your Screen Display	5
Accessing Emails	6
Accessing PDF Files	12
Accessing Videos and Audio	15
Accessing Other and Obsolete Files	17
Accessing Obsolete and Corrupted Files	21
Accessing Graphs and Network Files	23
Using Screen Readers and Magnification Tools	29

How to Access Collections on the Reading Room Laptop

You can view born-digital and digitized materials on one of LSC's three reading room laptops. Born-digital refers to any file that was originally produced in digital form, such as emails, photos shot on a digital camera, or word-processed documents saved onto a floppy disk. Digitized refers to digital copies of originally analog materials.

The reading room laptops provide a view-only environment for born-digital and digitized collections. To preserve the integrity of these collections, **you are not allowed to copy, modify, or save files in any way**. USB ports and Wifi are disabled.

Additionally, **you are not allowed to take photos or screenshots of the laptop screen** when accessing born-digital and digitized materials. If you would like to request a copy of a file, please ask staff for a duplication request form. Staff can also provide a copy of our duplication policy.

If you would like to make the screen easier to read, utilize the Windows Ease of Access Settings. From here you can change the text size, magnification of the overall screen brightness levels, and the size and color of the cursor and mouse pointer.

Finding Your Collection

Digital collections are located on the D: drive. To begin exploring your collection, open File Explorer by clicking the File Explorer icon on the taskbar.



Or, click on the Windows icon on the bottom left corner of the taskbar, type "File Explorer" into the search bar, and click on the File Explorer application.



In the File Explorer, select the D: drive and open the desired collection folder. Collection folders should be named with the collection's name and number (e.g. "Collection 1373 Peggy Hamilton Adams papers"). Please feel free to consult staff if you need assistance finding your collection.

Check to see if the collections folder contains a .txt file named README.txt. If it does, this would be a good place to start; the README.txt file includes information about how the collection was processed and organized and how best to access the collection materials. If the collection does not have a README.txt file, you can move on to viewing collection items.

Applications for Opening Collection Items

Laptops are loaded with several applications to provide access to born-digital and digitized materials:

Emails: ePADD

Emails in the archives are accessible through ePADD, which is a program that allows you to more easily browse, search, and view attachments in email collections.

PDFs: Acrobat Reader DC and Microsoft Edge

PDF files are accessible through Adobe Acrobat Reader and Microsoft Edge.

Images: Windows Photo Viewer

Images are accessible through Windows Photo Viewer, which can open .jpeg, .tiff, .png, .gif, and .bmp files.

Videos and audio: VLC media player

Video and audio files are accessible through VLC media player, which plays most multimedia files, including .mpeg2, .mpeg4, .mkv, .webm, .wmv, and .mp3 files.

Word, Excel, PowerPoint, and other Office files: Microsoft Office 2016

Microsoft Office files can be viewed through the Microsoft Office 2016 suite of applications, which includes:

- *Access*: Program that opens database files. File formats include .accdb and .mdb.
- *Database Compare*: Program that compares two Access databases to identify differences between table, query, report, object design, and more.
- *Excel*: Program that opens spreadsheet files. File formats include .xlsx, .xlsm and .csv files.
- *Spreadsheet Compare*: Program that compares two workbooks to identify differences (in values, formulas, and formatting), by line and by cell.
- *Word*: Program that opens word processing, text-based files. File formats include .docx, .doc, and .docm.
- *PowerPoint*: Program that opens presentation slide files. File formats include .pptx and .ppt files.
- *OneNote*: Program that opens note files that can contain handwritten notes, drawings, and audio commentaries. File formats include .one files.
- *Project*: A project management software for organizing, tracking, and maintaining project plans. File formats include .mpp files.
- *Publisher*: Program focused on page layout and design (as opposed to Word, which focuses on text composition). File formats include .pub files.
- *Visio*: Program that opens diagramming and vector graphic files. File formats include .vd, .vss, .vdw, .vsdx, .vsdm files.

- *Language Preferences*: Allows you to switch between languages within Microsoft Office applications.

Older editions of Microsoft Office files that cannot be opened through Microsoft Office 2016 can be viewed on Quick View Plus and HxD Hex Editor (see below).

Graphs and data files: Gephi

Gephi is a visualization and exploration program for graphs and networks. Specific file types that can be accessed include .gexf, .gdf, .gml, and .csv files.

Other and obsolete file types: Quick View Plus

Sometimes file formats are no longer readable because they were created with a software that is no longer in use or supported. A good example of this would be older word processing files like WordStar. Quick View Plus is a file viewer that can open 300+ file types in their original format. This is especially useful for common but obsolete word processing and image file formats, which make up a large portion of the collections. Additionally, Quick View Plus can open a broad range of file types from applications that are not loaded onto the laptop, so it can also be a useful program if you come across a unique file type. File types that can be accessed through Quick View Plus include WordPerfect files as well as older Excel, Outlook, PowerPoint, Access, and Word files.

Obsolete and corrupted file types: HxD Hex Editor

If you are unable to open a file because it is an obsolete file format or because it is corrupted, as a last resort you could use HxD Hex Editor to open the file. An obsolete file type is one that is no longer readable because it was created with a software that is no longer in use or supported. A corrupted file type is one that is no longer readable because it has been altered by a software or hardware bug or failure. Through HxD Hex Editor, you may be able to access such files as the program displays a file's binary data, parsing and expressing information about the file from its bytes. This tool is most useful for text-based documents.

Assistive Technologies

The following accessibility applications can be found in "Accessibility Settings" folder on the desktop.

Windows Ease of Access Settings

You can customize elements of screen display through the Windows Ease of Access Settings, including text size, magnification of the overall screen, brightness levels, and the size and color of the cursor and mouse pointer.

JAWS, ZoomText, and Fusion

JAWS is a screen reading program that allows you to read the screen with text-to-speech output. ZoomText is a screen magnification tool that also utilizes

visual enhancements to make it easier to view a computer screen. Fusion combines JAWS and ZoomText technologies to both magnify the screen and enable screen reading.

NVDA (NonVisual Desktop Access)

NVDA is a screen reading program that allows you to read the screen with text-to-speech output.

FSReader

FSReader opens Digital Accessible Information SYstem (DAISY)-formatted talking books, audio cassettes, and CDs as well as audiobooks from Learning Ally. The program comes with navigation tools for reading, allowing you to go directly to specific chapters, headings, or pages as well as create bookmarks. FSReader also allows you to speed up or slow down narration, with books coming with recorded audio and/or synthesized speech.

Customize Your Screen Display

Windows Ease of Access Settings User Guide

You can use Windows Ease of Access Settings to make the screen easier to read. From here you can adjust the text size, magnification of the overall screen, screen brightness levels, and the size and color of the cursor and mouse pointer.

To open up the Ease of Access settings, click the “Settings” icon on the taskbar.



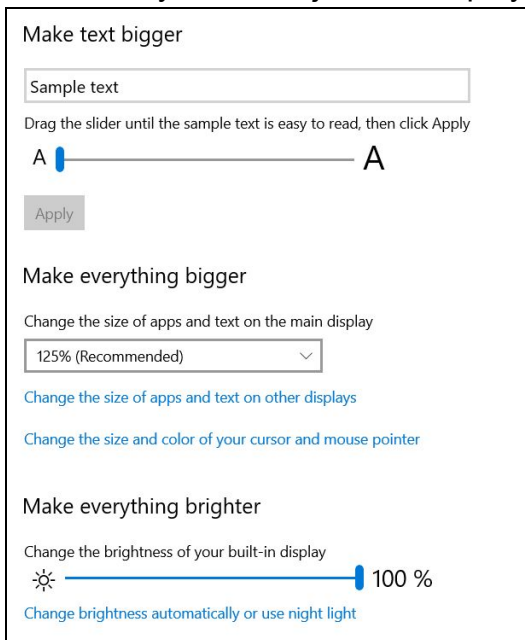
Or, click on the Windows icon on the bottom left corner of the taskbar, type “Settings” into the search bar, and click on the Settings application.



In the Settings menu, click “Ease of Access.”



From here you can adjust the display settings.



Accessing Emails

ePADD User Guide

Emails in the archives are accessible through ePADD. If you requested access to an email collection, the collection will have been loaded onto the laptop. ePADD is a program that allows you to more easily browse, search, label, annotate, and view attachments in email collections.

Before starting your research in an email collection, please review the README for that collection, which includes information about how the collection was processed and organized and how best to access the collection materials. The README can be found in the collection folder: Open File Explorer, select the D: drive, and open the desired collection folder. This folder should contain a .txt file named README.txt.

Starting ePADD

Launch ePADD by double-clicking the icon on the desktop.



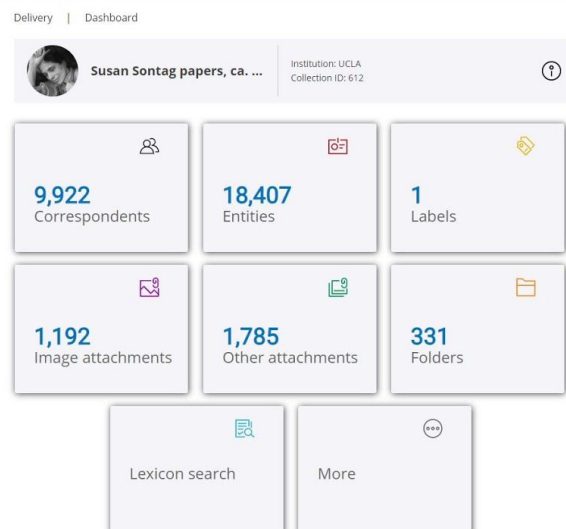
Or, click on the Windows icon on the bottom left corner, type “ePADD” into the search bar, and click on the ePADD application.



Click on the collection you would like to access. You can review collection details and finding aid contents and then click Enter to enter the collection.

Using ePADD

ePADD offers several ways to discover messages. Most useful will likely be the Search function and Browse by Correspondents list, which are accessible from the first screen you'll encounter after ePADD has been launched. The main functionalities are outlined below.



Browse



Browse allows you to browse the emails by several different categories. Browse options include:

A light gray rectangular card with a person icon in the top right corner. The number '9,922' is displayed in large blue font, with the word 'Correspondents' in smaller black font below it.

Correspondents - individuals with whom the email owner has corresponded. Each individual includes email addresses and name variations, which you can view by hovering your mouse over the name. Correspondent lists are automatically generated by ePADD and refined by the processing archivist.

TIP: You may wish to search for variations on a name or common misspellings.

A light gray rectangular card with a document icon in the top right corner. The number '18,407' is displayed in large blue font, with the word 'Entities' in smaller black font below it.

Entities - Entities include individuals, non-person groups, organizations, or other concepts that are mentioned in the subject or body of emails. Entities are automatically generated by ePADD. You may wish to search for variations on a name or common misspellings.

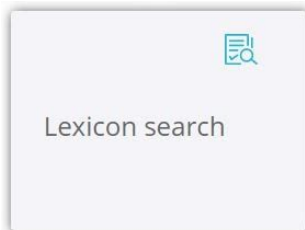
NOTE: due to technical issues, this list should NOT be edited.

A light gray rectangular card with a folder icon in the top right corner. The number '331' is displayed in large blue font, with the word 'Folders' in smaller black font below it.

Folder View - lists all the folders that were imported into ePADD during processing. Unless otherwise noted, folders represent the original organization of the emails by the email owner.

A light gray rectangular card with an image icon in the top right corner. The number '1,192' is displayed in large blue font, with the words 'Image attachments' in smaller black font below it.

Image Attachments - Displays all image attachments from the collection. Filter your search and scroll left and right to view images. Selecting an image and then the button on the top right labeled "Open this item's page" will open the email message linked to the attachment.



Other Attachments - lists and links non-image attachments. Filter, browse, and search attachments. Select an attachment to download it and view it in another program. ePADD does not offer viewing capabilities for non-image attachments, so you can download the file and open it in another program loaded to the computer, such as Microsoft Word, Adobe Reader, or Notepad.



Lexicon Search - predetermined search terms and groups of terms. Choose a lexicon at the top and select a category to perform the search. You can view the lexicon search terms by selecting the "View/Edit Lexicon" button. Search terms are highlighted in the resulting messages.

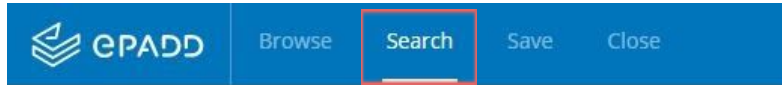
NOTE: any changes you make will not be saved after you leave the reading room.



Labels - allows you to label email messages. You can create a new label and add that label to appropriate messages for later reference.

NOTE: any changes you make will not be saved after you leave the reading room.

Search



Search allows you to search for terms in any part of the message. ePADD supports four types of search: simple search, advanced search, multi-entity, and multi-term search.

Note: Search tips can be accessed by selecting the button in the top right corner of the Advanced Search screen.



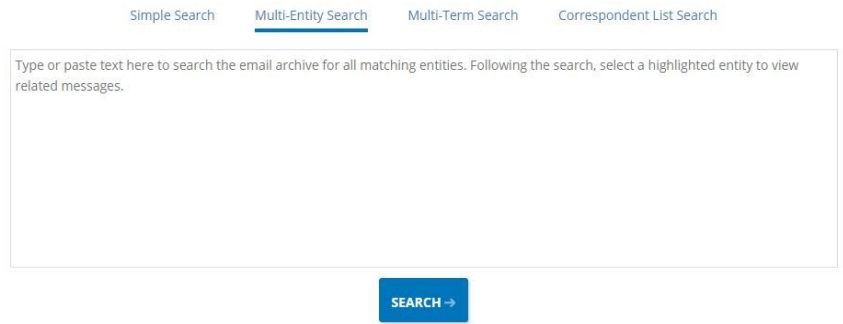
Simple Search - simply type in your query into the simple search box available on the initial search screen. This will search across message headers (correspondents and subjects) and message text, as well as the text of all document attachments. Once you have entered your term(s) and made your selection, click the Search button. The search string will appear highlighted on the search results screen. For phrases, use double quotes around the text.

A screenshot of the Simple Search interface. It features three tabs: 'Simple Search' (selected), 'Multi-Entity Search', and 'Multi-Term Search'. Below the tabs is a search query input field containing the text 'search query'. To the right of the input field is a blue 'SEARCH →' button.

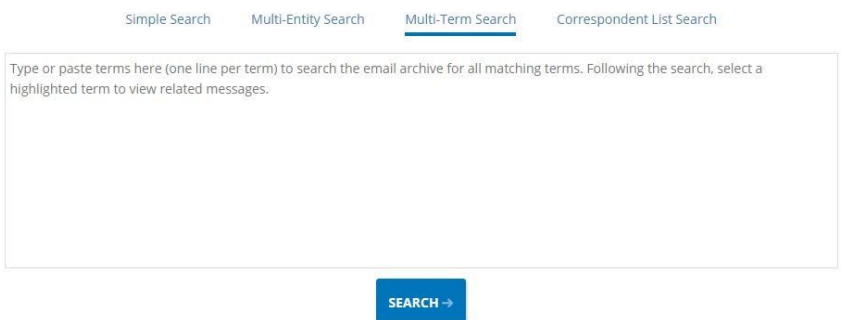
Advanced Search - enables you to generate complex searches of email text, correspondents, attachments, and any actions previously taken on the messages, as well as a variety of other parameters.

A screenshot of the Advanced Search interface. The title is 'Advanced Search'. It is divided into several sections: 'Text' with a 'Terms' input field and checkboxes for 'Search body', 'Search subject', 'Search attachments', and 'Search original text'; 'Entity' with an input field and a checked checkbox for 'Expand to other entities of the same class'; 'Correspondents' with a 'Name or email' input field and checkboxes for 'To', 'From', 'Cc', and 'Bcc'; 'Mailing List' with radio buttons for 'Yes', 'No', and 'Either'; and 'Attachments'.

Multi-Entity Search - searches the email archive for entities contained in a given block of provided text. Any matching terms will be highlighted on the results page.



Multi-Term Search - searches the email archive for multiple terms provided. After search, select a highlighted term to view resulting messages.



Tips for Framing Your Search

Changes made and special characters: ePADD does not currently support non-English characters in Correspondent names. If searching for a word or name with a non-English character, such as an accented letter, try the search by replacing the character with the closest English equivalent (àâãäå all become a). You can also try the search replacing the character with a space or with a question mark (?) as a wildcard.

Duplicates: duplicate emails have been removed by ePADD. Duplicates have been noted in the Full Access File List.

Import Errors: Due to encoding errors in the files themselves, some email messages and attachments may not have been imported into ePADD. These messages are noted in the README and information about all messages can be found on the Email Files Report. These emails can be found in the Collection-specific folder. If you have questions about these emails, please contact a member of staff.

Save



Saves the changes you have made, such as labels you have created or new lexicon search terms. Please note that these changes are not permanent and will not be saved once you leave the reading room.

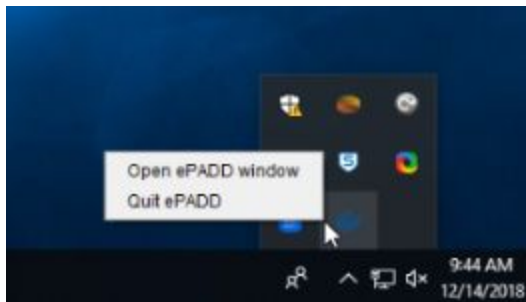
Close



Closes the collection and returns to the home page. From here you can exit the program or enter another collection.

Troubleshooting

If you receive an error message, close the collection, close the browser window and quit the program by right-clicking on the ePADD icon in the taskbar and selecting Quit ePADD. Then open the program again. If the problem persists, please alert the staff.



Accessing PDF Files

Adobe Reader DC User Guide

PDF files can be opened with either Microsoft Edge or Adobe Reader DC. This primer will review Adobe Reader, as the program has more functionality in terms of viewing and annotating files.

Starting Adobe Acrobat DC

PDF files are already programmed to automatically open through Adobe Reader, so to view a file with the program you can simply navigate to it in the D drive and double click.


Or, you can click on the Windows icon on the bottom left corner, type “Adobe Reader” into the search bar, and click on the Adobe Reader application to open the program.





Once in Adobe Reader, click File > Open, and then navigate to the file you wish to see.

Using Adobe Acrobat DC

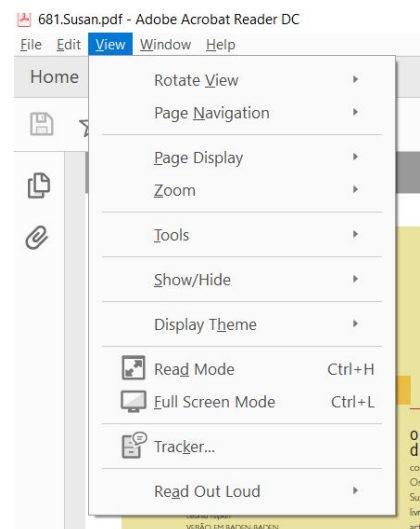
The toolbar at the top of the page has several buttons that allow you to navigate around the document.

 Select, which allows you to highlight and select text and images.

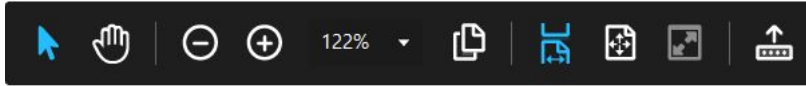
 Pan around the page, which allows you to move to the part of the page you wish to see without selecting text or images.

 Zoom settings

Many of these functionalities and more can be carried out through the “View” tab, including rotating the page clockwise or counterclockwise, viewing the PDF full screen mode, various zoom settings, and displaying 1 or 2 pages at a time.



By default, this toolbar is at the top of the page. But if the settings have been changed, you may see it at the bottom of the page, in a black box that appears if you move your mouse over the bottom of the page.



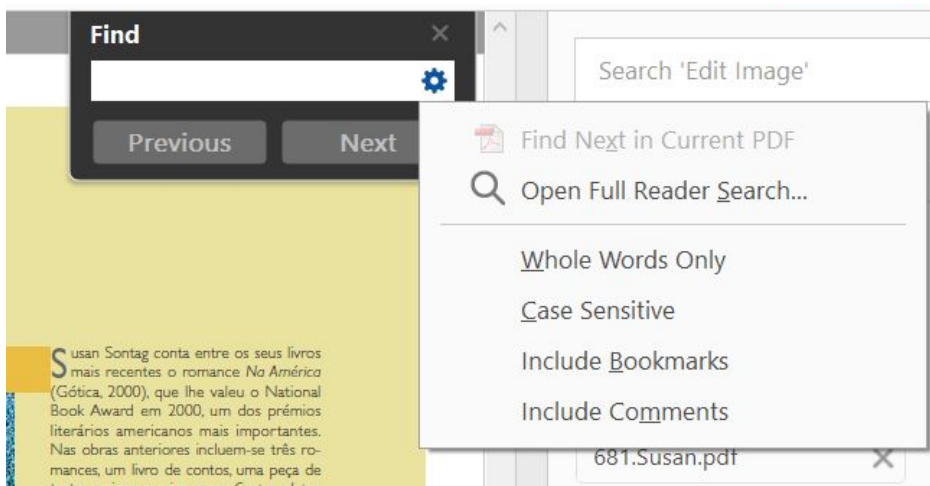
Moves the toolbar to the top of the page, and vice versa.

Conducting a keyword search

To conduct a keyword search, you can click Edit > Find, or use the Find button on the toolbar.



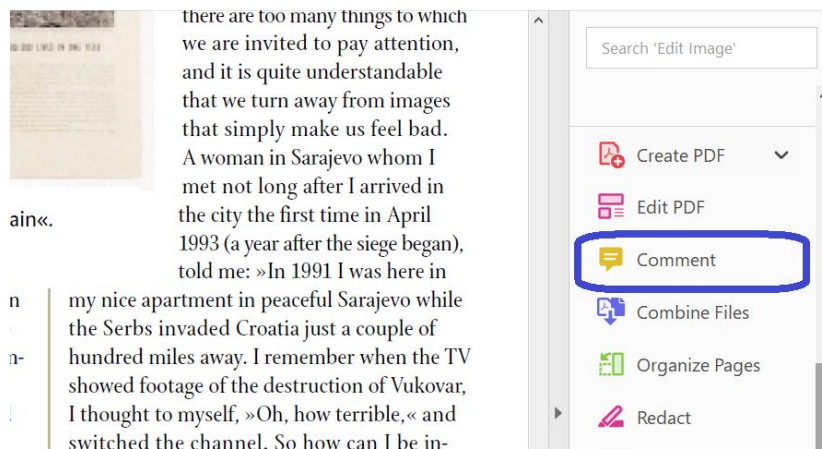
A black search box will appear in the upper right corner of the document. If you click the gear button within the search field, a drop-down menu will allow you to customize your search.





Creating annotations

Adobe Acrobat allows you to annotate the PDF, which can be helpful if there are certain pages or sections you would like to flag and return back to. However, please note that any changes you make will not be saved after you leave the reading room, and your annotated document cannot be emailed to you. Accordingly, this functionality should only be used for aiding your research while you are in the reading room.

To create comments, click the Comment button on the Tools menu, which is on the far right of the document.



The toolbar at the top of the page has different annotation capabilities, including:

-  Comment, which allows you to leave “post-it” note comments to the page.
-  Highlight, which allows you to highlight text.

All of your annotations will appear on the Comments pane on the right. You can navigate directly to a comment through this Comments pane.



Accessing Videos and Audio

VLC Media Player User Guide

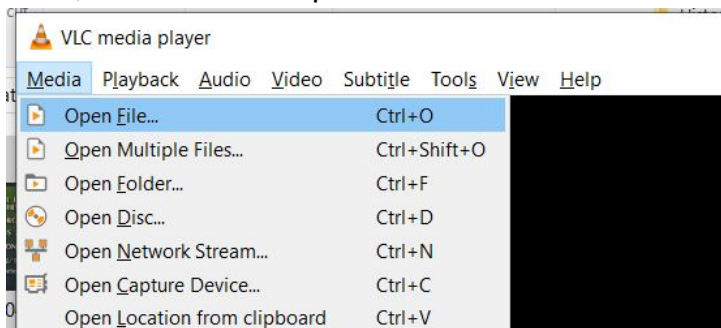
Most multimedia files can be accessed through VLC media player. Headphones and headphone splitters (for group research) are available to borrow from the reading room attendant.

Starting VLC media player

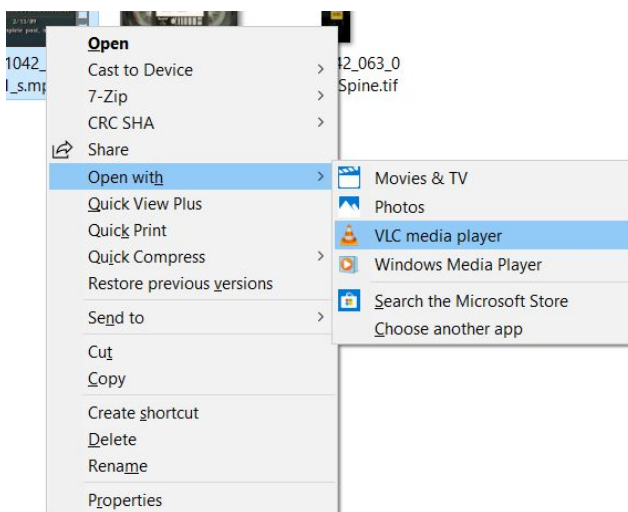
Click on the Windows icon on the bottom left corner, type “VLC media player” into the search bar, and click on the VLC media player application to open the program.



Then, click Media > Open File...

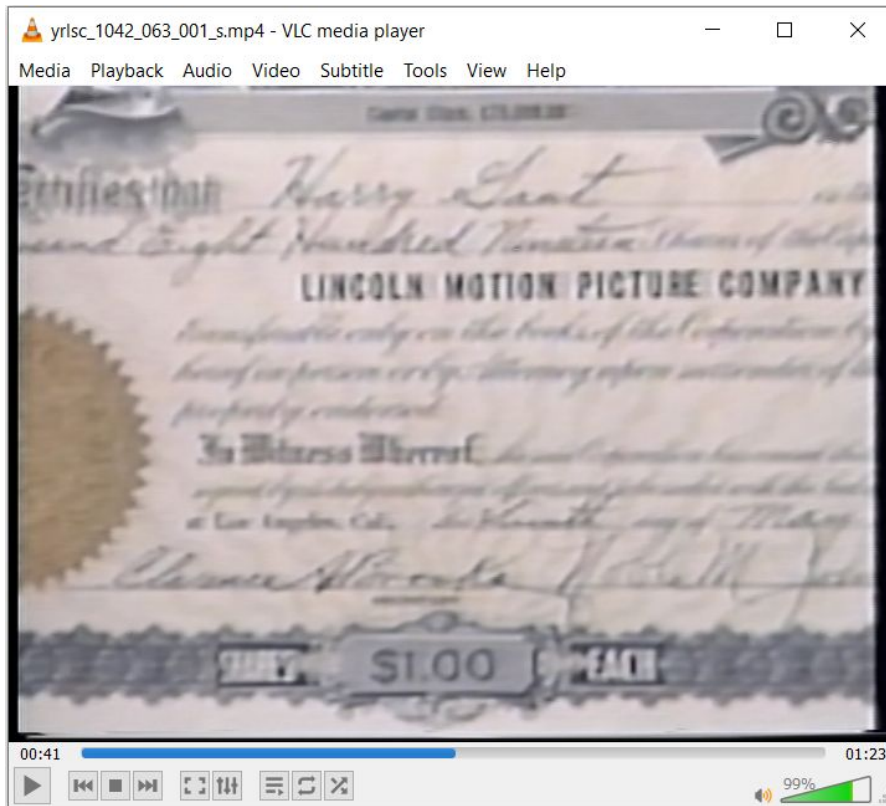


Or, you may find it more useful to open VLC media player straight from a folder. To do so, select the file you wish to open in VLC media player. Then, right click, select “Open with,” and then select “VLC media player.”




Playing an audio or video file


Once you open an audio or video file, it will automatically begin playing. The toolbar at the bottom of the screen can help you navigate within the video or adjust the volume.



 Play

 Stop

 Restart

 View in full screen

 Adjust volume

You can also navigate to a specific time within the video or audio file by clicking the desired time within the progress bar



Accessing Other and Obsolete Files

Quick View Plus User Guide

Quick View Plus is a file viewer that can open a variety of word processing, spreadsheet, archival, database, and email file formats, regardless of whether those programs are loaded onto the reading room laptop. This is especially useful for common but obsolete file formats, which make up a large portion of the collections.

If you come across a corrupted file that you are not able to open with Quick View Plus or HxD Hex Editor, and you wish to debug and review further on your own computer, you can request a copy. Ask staff for a duplication request form. Staff can also provide a copy of our duplication policy.

Starting Quick View Plus

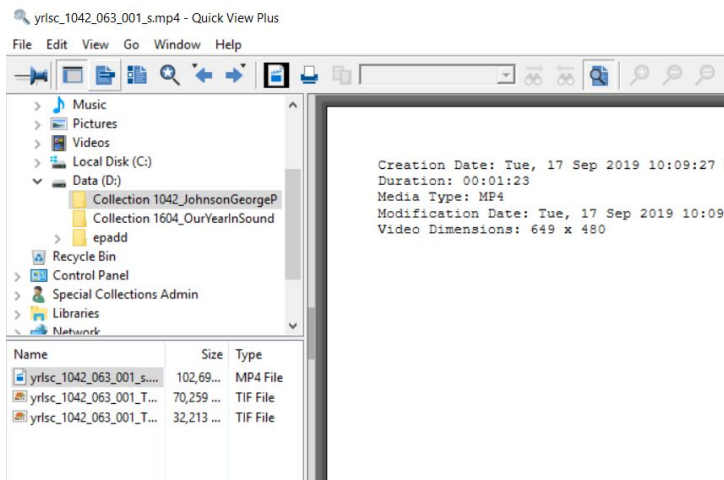
There are several ways to open a file with Quick View Plus:

Open Quick View Plus from the program menu:

Click on the Windows icon on the bottom left corner, type “Quick View Plus” into the search bar, and click on the Quick View Plus application to open the program.



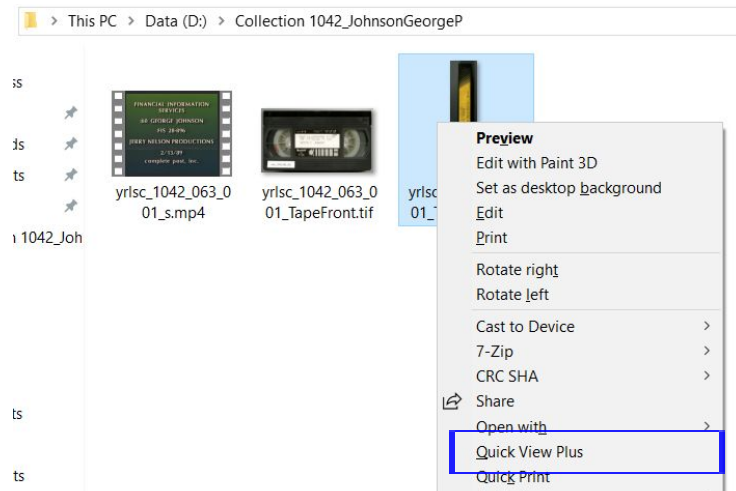
Once in Quick View Plus, use the folder navigation pane in the upper left to navigate to the file on your computer. The file contents of the selected folder will appear in the bottom left pane.



Click once to view the file in the right pane. You only need to click once on the file to view it. Clicking twice on the file will launch the file's default editing or viewing application, if it is available on your computer.

Open Quick View Plus directly from the file folder:

You may find it more useful to open Quick View Plus straight from a folder. To do so, select the file you wish to open in Quick View Plus. Then, right click and select “Quick View Plus.”



Open multiple files once Quick View Plus is already open:

If you would like to view multiple files in different windows on Quick View Plus, open the application. Then from the File menu, select “Open another file for viewing” and find the file you would like to see. This will open up another window for the new file, which can be helpful if there are two files you would like to see or compare at the same time.



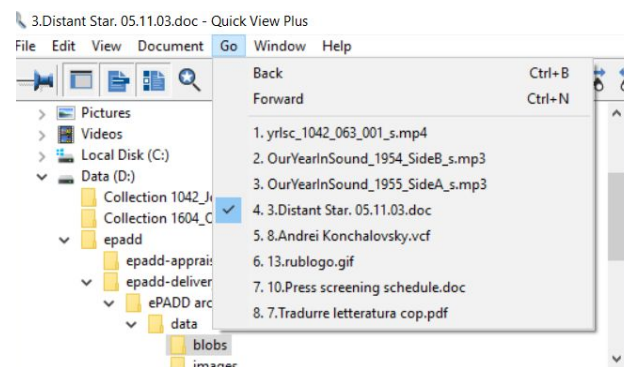
You can also click this “New QVP Window” button on the toolbar to open a file in a new window.

Navigating between files

The “Go” menu allows you to see your eight most recently viewed files, and navigate between them.

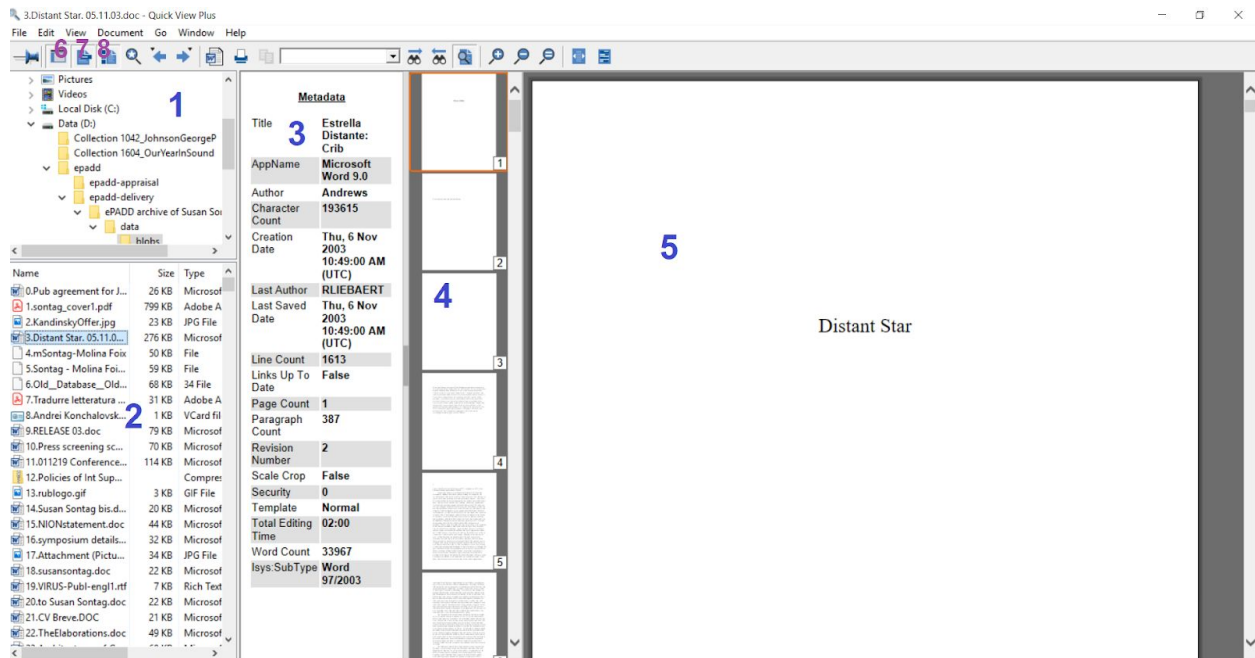


You can also use the “Back” and “Forward” buttons on the toolbar to navigate between the files you have viewed.



Using Quick View Plus

The Quick View Plus interface is comprised of several panes, some of which you can toggle on and off.



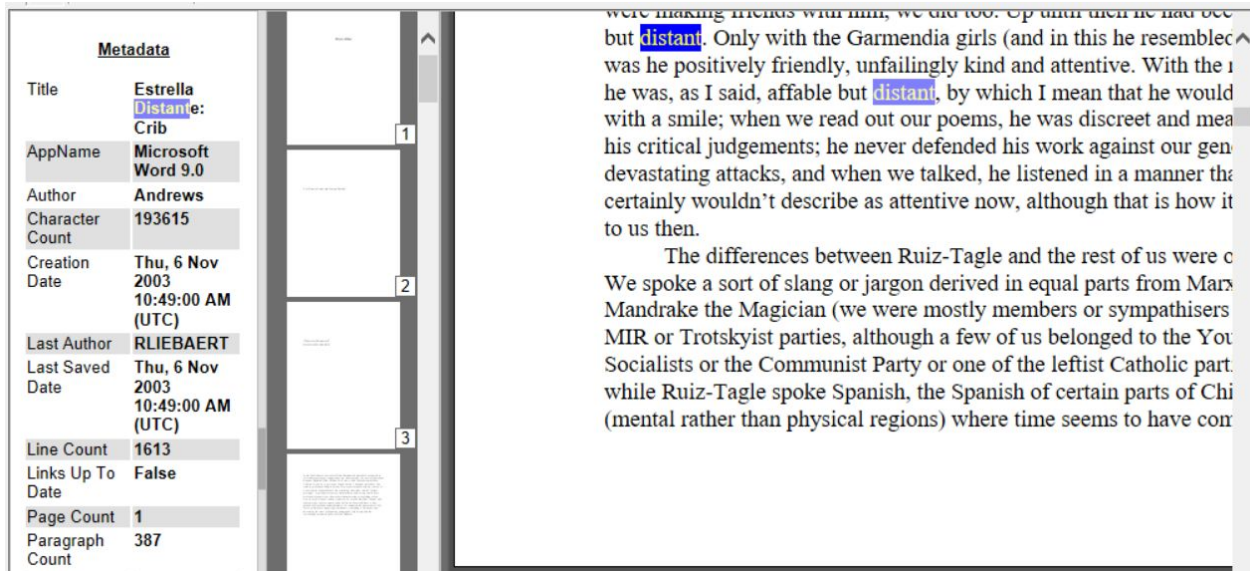
1. **Folder tree pane**, from which you can navigate to your desired folder.
2. **Folder contents pane**, from which you can select the file you wish to view. This pane also displays the file's size and file format (even if the file format extension has been changed or removed).
3. **Metadata pane**, which shows metadata for the file you are viewing.
4. **Thumbnails pane**, which shows thumbnails of each page in the file you are viewing.
5. **File view pane**, where you can see the file you have selected.
6. **File navigator toggle**, which you can click to show or hide panes 1 and 2.
7. **Metadata toggle**, which you can click to show or hide pane 3.
8. **Thumbnails toggle**, which you can click to show or hide pane 4.

Conducting a keyword search

Quick View Plus is able to run text searches on word processing files, spreadsheets, presentation files, and Internet file formats. To run a search, select the file you'd like to search within, and then enter a search term in the search toolbar. All search results are highlighted. Navigate between results with the "Find Next" and "Find Previous" buttons on the toolbar.



Search results can be found both within the file itself and the file's metadata.



Metadata	
Title	Estrella Distant: Crib
AppName	Microsoft Word 9.0
Author	Andrews
Character Count	193615
Creation Date	Thu, 6 Nov 2003 10:49:00 AM (UTC)
Last Author	RLIEBAERT
Last Saved Date	Thu, 6 Nov 2003 10:49:00 AM (UTC)
Line Count	1613
Links Up To Date	False
Page Count	1
Paragraph Count	387

were making friends with him, we did too. Up until then he had been but **distant**. Only with the Garmendia girls (and in this he resembled ^ was he positively friendly, unfailingly kind and attentive. With the 1 he was, as I said, affable but **distant**, by which I mean that he would with a smile; when we read out our poems, he was discreet and made his critical judgements; he never defended his work against our general devastating attacks, and when we talked, he listened in a manner that certainly wouldn't describe as attentive now, although that is how it to us then.

The differences between Ruiz-Tagle and the rest of us were clear. We spoke a sort of slang or jargon derived in equal parts from Marx, Mandrake the Magician (we were mostly members or sympathisers of the MIR or Trotskyist parties, although a few of us belonged to the Youth Socialists or the Communist Party or one of the leftist Catholic parties) while Ruiz-Tagle spoke Spanish, the Spanish of certain parts of Chile (mental rather than physical regions) where time seems to have come



If you would like to automatically search each new document that you open for the same search term, click the "Auto Search" button on the toolbar.

Showing hidden aspects of files



Click the "Hidden Content" button on the toolbar to display inserted and deleted text and tracked changes in documents.



Click the "Show Hidden Cells" button on the toolbar to display hidden cells in spreadsheet files.



Click the "Speaker Notes" button on the toolbar to display any speaker notes for the displayed slide in a Microsoft PowerPoint file.



Click the "Show Comments" button on the toolbar to display any comments for the displayed slide in a Microsoft PowerPoint file.

Accessing Obsolete and Corrupted Files

HxD Hex Editor User Guide

HxD Hex Editor can be useful for exploring corrupted or obsolete files that will not open in other applications. HxD Hex Editor displays a file's binary data, allowing you to see the raw contents of a file instead of an interpretation of that content through a higher level software. This tool is most useful for text-based documents.

If you come across a corrupted file that you are not able to open with Quick View Plus or HxD Hex Editor, and you wish to debug and review further on your own computer, you can request a copy. Ask staff for a duplication request form. Staff can also provide a copy of our duplication policy.

Starting HxD Hex Editor

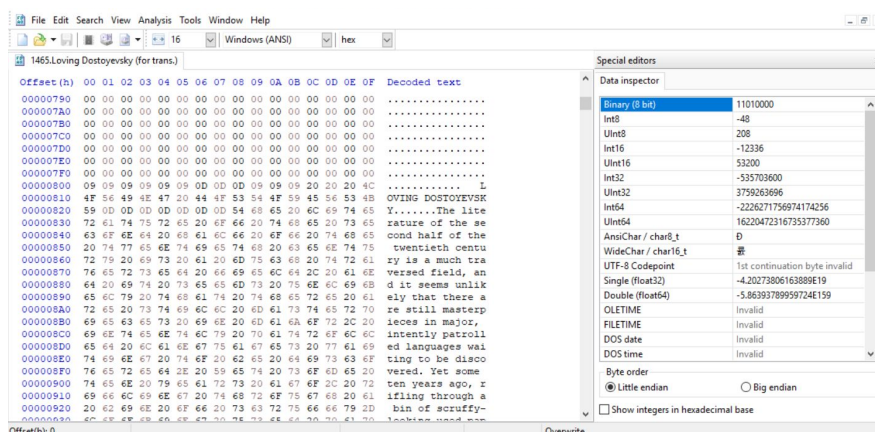
There may be files within a collection that have unknown file types, or are corrupted.

Name	Date modified	Type	Size
1465.Loving Dostoyevsky (for trans.)	1/22/2019 4:10 PM) File	48 KB
57.=_iso-8859-1_B_UGFpdmEgkExhIE5hY...	1/22/2019 4:10 PM	=_ISO-8859-1_B_U...	6 KB
693.=_iso-8859-1_Q_Ante_el_dolor_de_lo...	1/22/2019 4:10 PM	=_ISO-8859-1_Q_A...	26 KB
722.=_iso-8859-1_Q_La=20felicidad=20c...	1/22/2019 4:10 PM	=_ISO-8859-1_Q_L...	27 KB

To view the file in HxD Hex Editor, click on the Windows icon on the bottom left corner, type "HxD" into the search bar, and click on the HxD application to open the program.



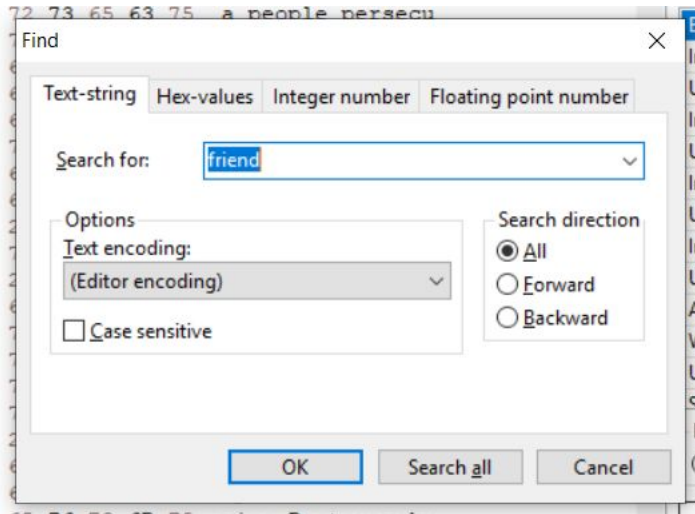
Once in HxD Hex Editor, click File > Open, and then navigate to the file you wish to see. The resulting interface displays the file's binary data in the left pane, along with any text decoded from the bytes. The right pane displays information about the bit your cursor is currently on in the left pane.



Conducting a keyword search

HxD allows you to search for text within the document. Click Search > Find to bring up the search box. Be sure the “Text-string” tab in the upper left is selected. In the “Search for” box, type your desired keyword.

The keyword search can be executed in two ways. To find the next instance of that keyword, click the “OK” button. To find all instances of that keyword within the document, click the “Search all” button.



As part of the search results, HxD will highlight the word within the “Decoded text” column, as well as its corresponding bits to the left.

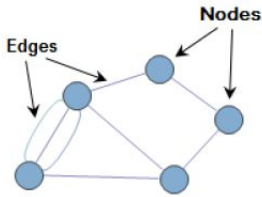
If you clicked the “Search all” button, all of the instances of that keyword within the document will appear in a pane at the bottom. From there, you can double click on an instance to navigate directly to it.

Offset	Excerpt (hex)	Excerpt (text)
FB2	20 61 6E 20 69 6E 66 6C 75 65 6E 74 69 61 6C 20 66 72 69 65 6E 64 2C 20 61 66 74 65 72 20 68 65	an influential friend , after he
2580	20 48 65 20 68 61 64 20 6E 6F 20 72 65 61 6C 20 66 72 69 65 6E 64 73 20 69 6E 20 61 6E 79 20 6F	He had no real friends in any o
35FD	72 2C 20 61 20 6A 6F 75 72 6E 61 6C 69 73 74 20 66 72 69 65 6E 64 20 77 68 6F 20 68 61 64 20 72	r, a journalist friend who had r
36DE	6F 66 20 74 77 6F 20 41 6D 65 72 69 63 61 6E 20 66 72 69 65 6E 64 73 2C 20 61 20 6D 61 72 72 69	of two American friends , a marri
5007	64 65 72 6C 79 20 64 65 73 63 72 69 62 65 64 20 66 72 69 65 6E 64 20 6F 66 20 68 69 73 20 6D 6F	derly described friend of his mo
51EB	66 66 65 63 74 69 6F 6E 61 74 65 20 6F 6C 64 20 66 72 69 65 6E 64 2C 20 61 6E 64 20 68 65 61 72	ffectionate old friend , and hear
6111	65 64 20 61 6F 64 20 74 69 65 20 6F 61 65 20 20 66 72 69 65 6E 64 73 20 61 6E 64 20 61 63 71 75	ed the man, friend and some

Accessing Graphs and Network Files

Gephi User Guide

Gephi is a software for visualizing and analyzing networks. Networks are a group of entities that are related in some way. Network analysis attempts to map the relationship between these entities, to reveal trends in the data.



Networks are comprised of nodes (the entities) and edges (the relationships between the nodes).

Network graphs are considered undirected when the relationship goes both ways. For example, if you are friends with someone on Facebook, they are also friends with you. Network graphs can also be directed. For example, if you follow a celebrity on Twitter, but they do not follow you back. To create a network graph on Gephi, you will need to know the nodes, edges, and whether or not the graph is directed or undirected.

Starting Gephi

Click on the Windows icon on the bottom left corner, type “Gephi” into the search bar, and click on the Gephi application to open the program.

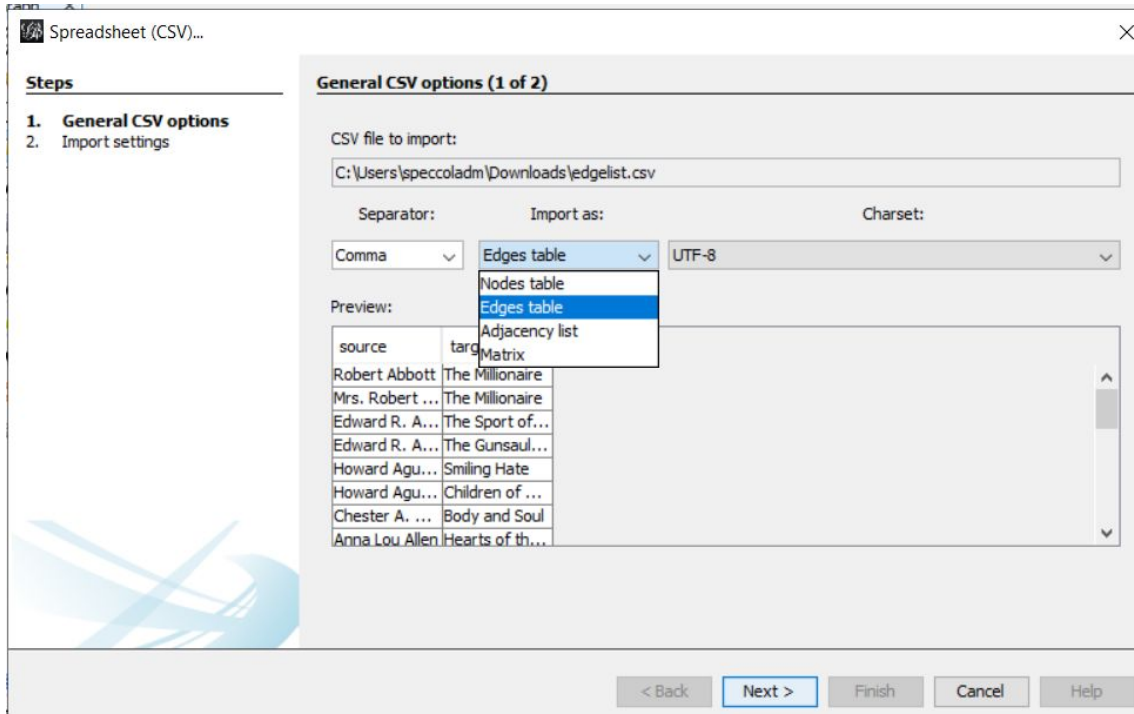


Once in Gephi, click File > New Project to create a new workspace.

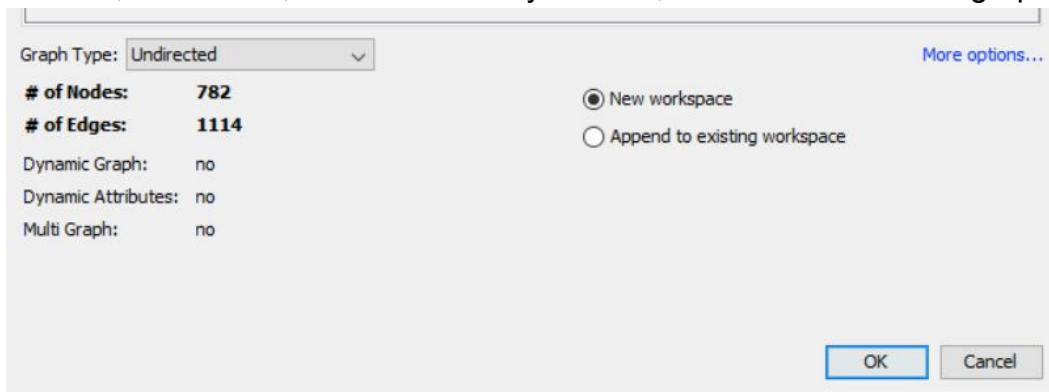
Creating a network visualization

To create a network visualization, you will need to load your data. You can do this with File > Open. There are several options for visualizing data, which you can see under “Import as” drop-down menu. This manual will review importing an edge list. An edge list is comprised of two columns of entities, which depict a relationship. For example, if you wanted to explore which actors were in movies together, you could have a column of actors and a column of movies, in which each row reflects when an actor was in a certain movie.

For Gephi, the edge list will need to have a source and a target column in order to process. You may need to go into the dataset itself and narrow it down to two columns, one titled “source” and the other target.” The distinction between “source” and “target” only matters when it is a directed relationship, which shows the direction of the relationship.



Continue through the Wizard by clicking “Next” and “Finish.” The final screen tells you the number of nodes and edges. This is also where you designate if the graph is directed, undirected, or mixed. Once you have, click “OK” to see the graph.



Navigating around a network visualization

The graph may initially look dense and hard to interpret.



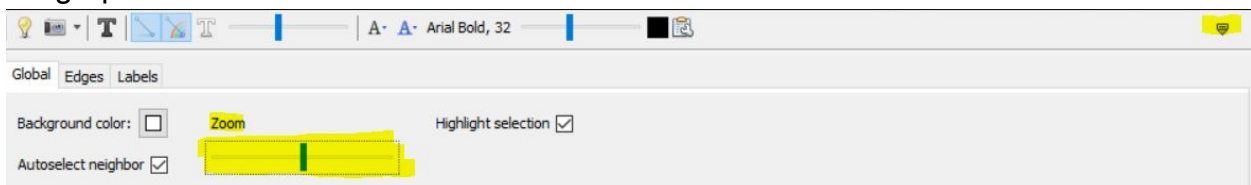
There are a few tools you can use to navigate around the graph.



This centering button, located on toolbar to the left of the graph, centers the view back on the graph.

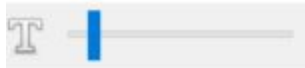
You can move around by right clicking and then dragging with the mouse.

To zoom in and out, click the triangle located in the top right corner of the toolbar below the graph. This will reveal the zoom slider.



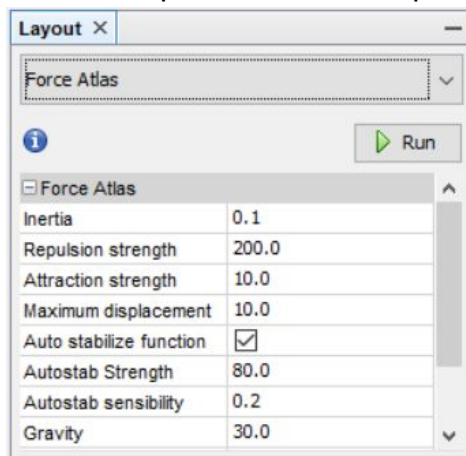
Changing the appearance of a network visualization

There are also a number of ways you can modify the visual look of the graph to be clearer.

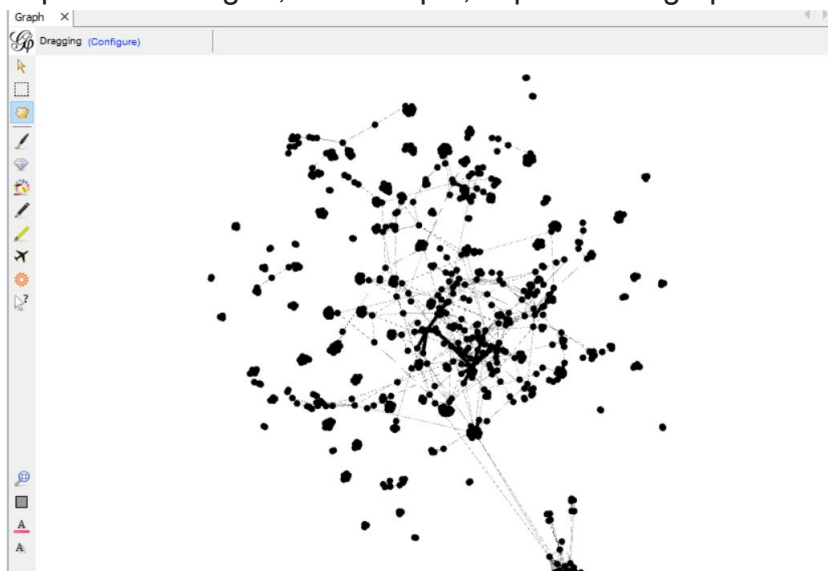


The edge thickness slider, located on the bottom toolbar, will make the edges thinner or thicker.

Use the Layout pane on the upper left to change the shape of the graph. There are several different layout options you could test out. A good one to start with is Force Atlas. Force-based algorithms cause linked nodes to attract to one other and non-linked nodes to push apart. Select “Force Atlas” from the dropdown menu, and then click “Run” to implement, and “Stop” when the graph reaches a visual look that you like.

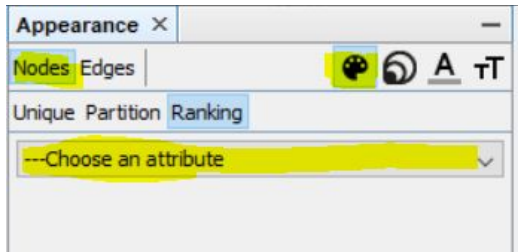


You can test out the preset measures of “Force Atlas,” or you can manually set the measures of the algorithm to make a graph that is easier to read. Increasing the “repulsion strength”, for example, expands the graph.

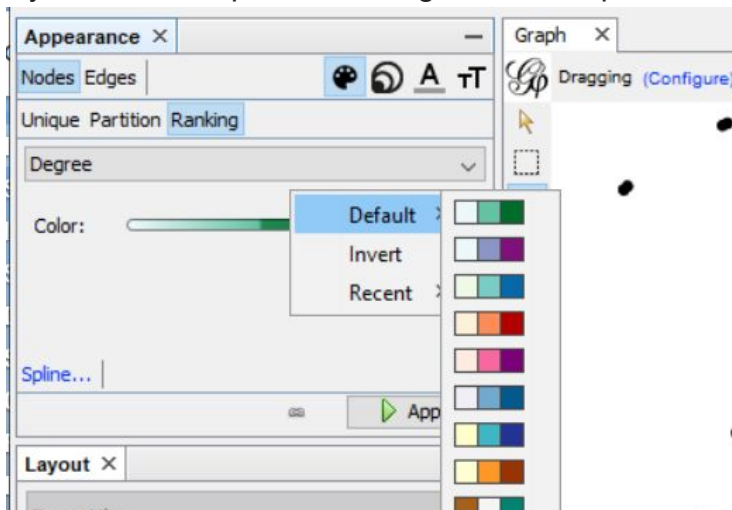


You can also change the size and color of the nodes, so that nodes with more centrality appear more dominant.

To change the color, go to the Appearance pane on the left, and click on “Ranking.” By default, a paint palette will be selected; this signifies you are changing the color. From the “Choose an attribute” drop-down menu, select “degree.”



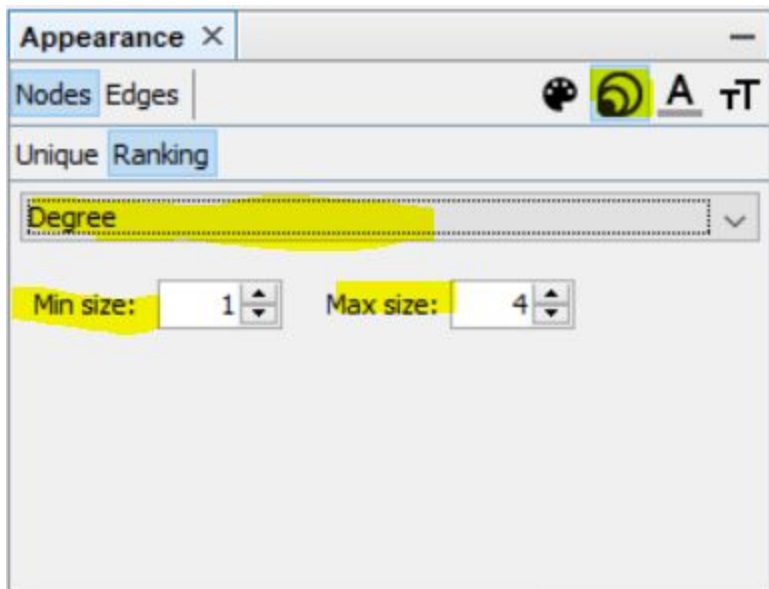
If you click on square to the right of color spectrum, you can change the color scheme.



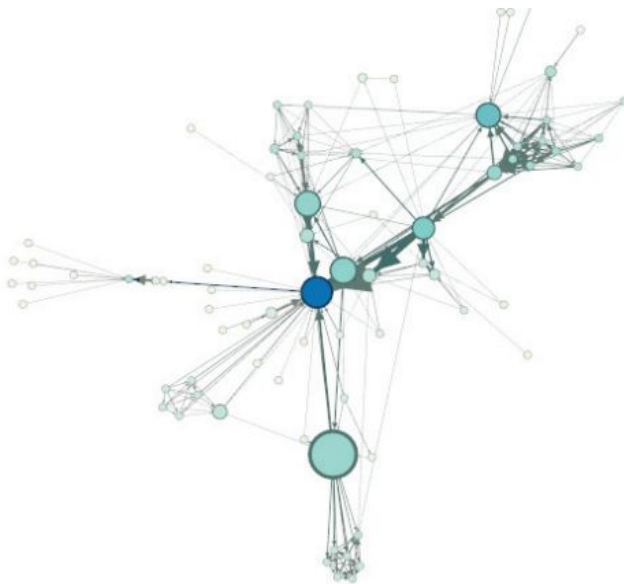
Click “Apply” to see the results.



To change the size of the nodes, click the size button, signified by several circles. Then choose “degree” from the drop-down menu, and click “Apply” to see the results. You can also manually edit the minimum and maximum sizes of the nodes.



Click “Apply” to see the results.



Using Screen Readers and Magnification Tools

JAWS, Fusion, and NVDA User Guide

The laptop is equipped with several applications that help visually impaired users access the laptop. The programs are set to their default hot keys. Please feel free to customize the hot keys to whatever works best for you. Please do not hesitate to ask staff for any assistance with setting up these programs.

JAWS

JAWS is a screen reading program that allows you to read the screen with text-to-speech output.

To open, click on the Windows icon on the bottom left corner, type “JAWS” into the search bar, and click on the JAWS application to open the program.



The screen reading technology will immediately begin working.

There are several keystrokes that can help you read and navigate the screen. Many involve the “insert” key, which is the zero key in the “num pad” area of the keyboard, pictured here. To enable that key as the “insert” key instead of zero, be sure that “num lock” is turned off (both keys highlighted in red here).



Once “num lock” is turned off, you can use the following keystrokes:

Say all = **INSERT+DOWN ARROW**. This command prompts JAWS to read the screen. While using this command, you can press the **LEFT ARROW** or **RIGHT ARROW** keys to rewind or fast forward through the text.

Increase or decrease the speech rate = **PAGE UP** or **PAGE DOWN**

Halt speech = **CTRL**

For a full listing of keystrokes, see the folder

on the desktop named “Keystrokes.”

Fusion

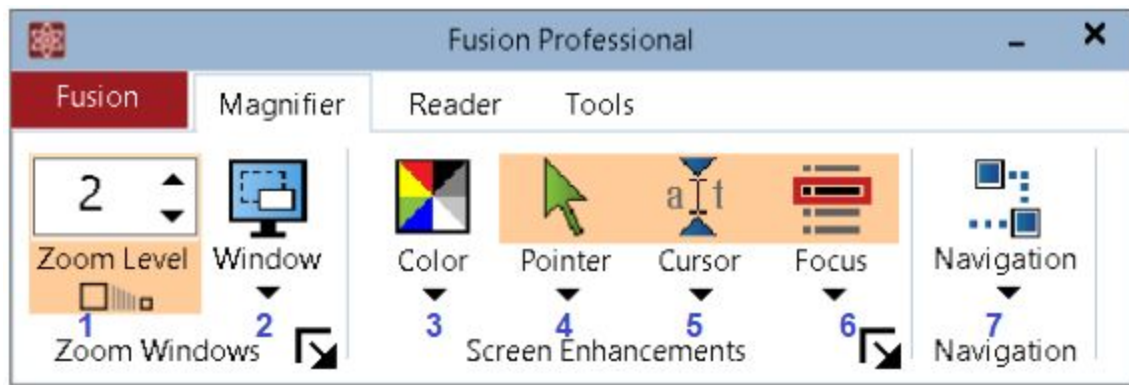
Fusion combines JAWS and ZoomText technologies to both magnify the screen and enable screen reading.

To open, click on the Windows icon on the bottom left corner, type “Fusion” into the search bar, and click on the Fusion application to open the program.



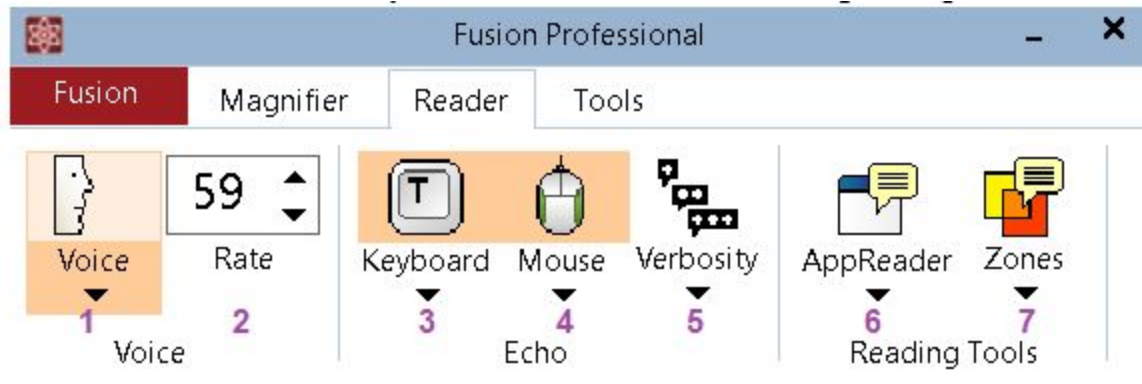
The JAWS screen reading technology will immediately begin working. You can use the same keystrokes as detailed above in the JAWS section to navigate and read the screen.

The Magnifier toolbar allows you to control magnification and screen display settings:



- 1. Zoom level**, where you can adjust the zoom for the overall screen
- 2. Window**, from which you can select the type of zoom you'd like to use (such as magnifying the entire screen or using a “lens” magnifying glass).
- 3. Color**, where you can adjust the brightness and colors on the screen (such as transforming the screen to black and yellow or inverting colors).
- 4. Pointer**, where you can adjust your pointer to be different colors and shapes.
- 5. Cursor**, where you can adjust your cursor to be different colors and shapes.
- 6. Focus**, where you can adjust the color and shape of the focus enhancement, which highlights the menu, dialog box, or button you are currently selecting.
- 7. Navigation**, where you control what actions Fusion tracks.

The Reader toolbar allows you to control the screen reading settings:



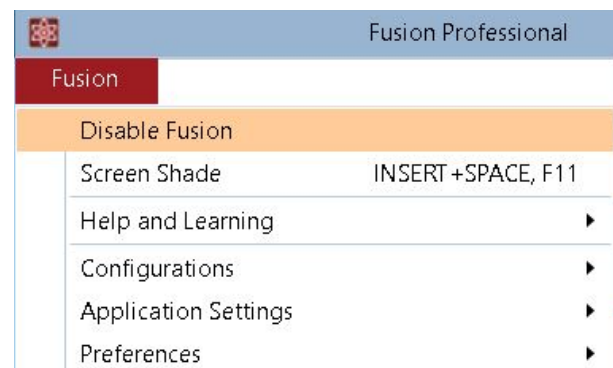
1. **Voice**, where you can toggle on and off the screen reading. You can also adjust how acronyms, numbers, and other text patterns are spoken.
2. **Rate**, where you can adjust how fast the screen reader speaks.
3. **Keyboard**, where you can turn on the keyboard echo mode, which gives immediate feedback for the keys and words that you type.
4. **Mouse**, where you can turn on the mouse echo mode, which automatically reads the text below the pointer.
5. **Verbosity**, where you can adjust the verbosity level, which is the amount of information read when an item on the screen is selected or in focus.
6. **AppReader**, where you can choose different reading modes.
7. **Zones**, where you can create, edit, and navigate reading zones, where you can instantly see and hear information at selected locations.

You can disable the screen magnification, screen reading, or both at any time:

To disable the screen magnification: **CAPS LOCK+CTRL+ENTER**

To disable the screen reading: **CAPS LOCK+ALT+ENTER**

To disable both the screen reader and screen magnification (pictured here):
 Go to Fusion > Disable Fusion.
 You can enable Fusion again here as well (Fusion > Enable Fusion).



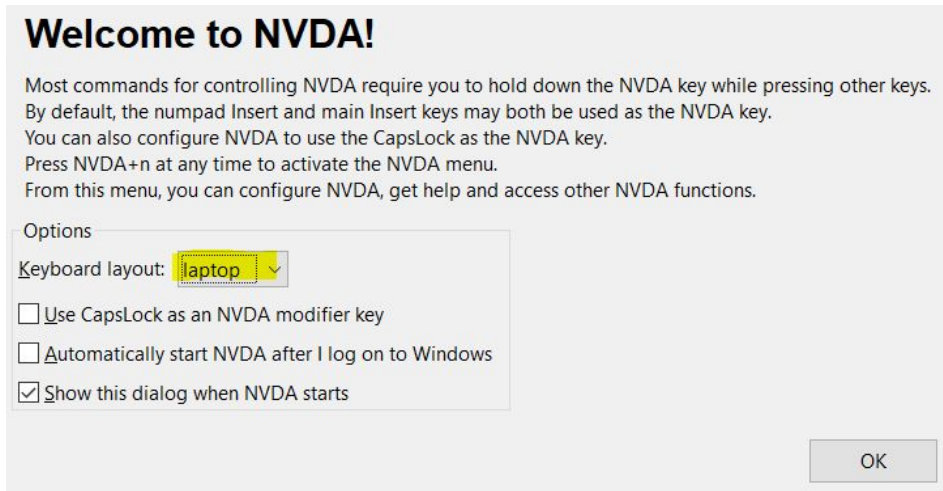
NVDA

NVDA is another screen reading program that allows you to read the screen with text-to-speech output.

To open, click on the Windows icon on the bottom left corner, type “NVDA” into the search bar, and click on the NVDA application to open the program.



The screen reading technology will immediately begin working, and the below menu will appear. Be sure that the keyboard layout is set to “laptop”. Many of the keystrokes will involve using an “NVDA key.” The default NVDA key will be the “insert” key in the “num pad” area (similar to JAWS). If you would like to instead use the “caps lock” key as your NVDA key, select the first checkbox. If not, leave unchecked. Then, click “OK.”



If you choose to keep the default and use the “insert” key as the NVDA key, be sure that “num lock” is turned off. The “insert” key and the “num lock” keys are highlighted here.

The following keystrokes can help you read and navigate the screen:

Say all (ie. read the screen): **NVDA+down arrow**

Stop speech: **CONTROL**

Pause speech: **SHIFT**

Bring up NVDA menu: **NVDA+n**

Quit NVDA: **NVDA+q**

For a full listing of keystrokes, see the folder on the desktop named “Keystrokes.”

