

Course Guide

# IBM Content Navigator 2.0.3.6: Box Integration

Course code F272 ERC 1.0



## May 2016 edition

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# Contents

<b>Trademarks .....</b>	<b>v</b>
<b>Course description .....</b>	<b>vi</b>
<b>Unit 1. IBM Content Navigator and Box Integration .....</b>	<b>1-1</b>
Unit objectives .....	1-2
1.1. View Box Content in IBM Content Navigator .....	1-3
View Box Content in IBM Content Navigator .....	1-4
Lessons .....	1-5
Why is this Lesson important to you? .....	1-6
Lesson objectives .....	1-7
IBM Content Navigator Box Integration .....	1-8
Box Capabilities available in IBM Content Navigator .....	1-10
Log in to IBM Content Navigator with Box .....	1-12
Browse to Box folders and documents .....	1-13
Box documents - Three types of metadata .....	1-14
Box documents - View and edit metadata in Content Navigator .....	1-15
Box documents - Add comments in IBM Content Navigator .....	1-16
Document Versions .....	1-17
Export Properties .....	1-18
Preview a Box document in Content Navigator .....	1-19
View two Box documents .....	1-20
Box Notes .....	1-21
Open Box Notes .....	1-22
Box Authentication: Box Account Linking .....	1-23
Demonstrations .....	1-24
Review questions .....	1-25
Review answers .....	1-26
1.2. Add Box Content in IBM Content Navigator .....	1-27
Add Box Content in IBM Content Navigator .....	1-28
Lessons .....	1-29
Why is this Lesson important to you? .....	1-30
Lesson objectives .....	1-31
Create Box folders in IBM Content Navigator .....	1-32
Add Box documents in IBM Content Navigator .....	1-33
Copy a Box document to another repository in IBM Content Navigator .....	1-34
Share a document from an ECM repository securely through Box .....	1-36
Add a Box document or a Box folder to IBM Content Navigator Favorites .....	1-38
Check out and Check in a Box document in Content Navigator .....	1-39
Box documents - Add comments in IBM Content Navigator .....	1-40
Add, edit, or delete Comments in Content Navigator Magazine View .....	1-41
Add a Web Link .....	1-42
View and open a Web Link .....	1-43
Demonstrations .....	1-44
Review questions .....	1-45
Review answers .....	1-46
1.3. Box Search in IBM Content Navigator .....	1-47
Box Search in IBM Content Navigator .....	1-48
Lessons .....	1-49
Why is this Lesson important to you? .....	1-50

Lesson objectives .....	1-51
Search for Box content in Content Navigator .....	1-52
Box Search Criteria: Repository Folder and Type of item .....	1-53
Box Search Criteria: File type and Content size filters .....	1-54
Box Search: Scope .....	1-55
Box Search: Content Based Search .....	1-56
Box Search: Property Criteria .....	1-57
Box Search: Results Display .....	1-58
Box Search: Web Links .....	1-59
Demonstrations .....	1-60
Review questions .....	1-61
Review answers .....	1-62
1.4. Cross-Repository Search .....	1-63
Cross-Repository Search .....	1-64
Lessons .....	1-65
Why is this Lesson important to you? .....	1-66
Lesson objectives .....	1-67
Box Search: Cross-Repository Search .....	1-68
Enable Cross-Repository Search .....	1-69
Cross-Repository Search settings: Scope .....	1-70
Cross-Repository Search: Property mapping .....	1-71
Cross-Repository Search settings: Properties .....	1-72
Cross-Repository Search .....	1-73
Cross-Repository Search: Results .....	1-74
Demonstrations .....	1-75
Review questions .....	1-76
Review answers .....	1-77
1.5. Configure Box repository in IBM Content Navigator .....	1-78
Configure Box repository in IBM Content Navigator .....	1-79
Lessons .....	1-80
Why is this Lesson important to you? .....	1-81
Lesson objectives .....	1-82
IBM Content Navigator and Box integration Install .....	1-83
Steps to configure a Box repository in IBM Content Navigator .....	1-84
Box: OAuth2 parameters .....	1-85
Configure Box repository in IBM Content Navigator .....	1-87
Provide OAuth2 Authentication values .....	1-88
Add a Box repository to a Content Navigator desktop .....	1-89
Set Box repository as the default for Browse .....	1-90
Steps to enable Box Share .....	1-91
Enable task manager in IBM Content Navigator Admin tool .....	1-92
Enable Box Share Services for a desktop .....	1-94
Set Share Administrator for the Box repository .....	1-95
Task manager connection ID for Box Share for ECM repository .....	1-96
Configure Box Share for an ECM repository .....	1-97
Box Authentication: OAuth2 Protocol .....	1-98
Demonstrations .....	1-100
Review questions .....	1-101
Review answers .....	1-102
Unit summary .....	1-103

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# Course description

## **IBM Content Navigator 2.0.3.6: Box Integration**

**Duration: 5 hours**

### **Purpose**

This course provides training on IBM Content Navigator and Box integration. You learn how to configure a Box repository in IBM Content Navigator. You also learn how to view, search, and add Box content in the IBM Content Navigator interface. You use the student guide and pre-recorded videos to complete the learning.

### **Audience**

- Anyone who needs to know the capabilities of IBM Content Navigator and Box integration.
- Administrators who configure IBM Content Navigator.

### **Prerequisites**

- Experience with IBM Content Navigator.
- Familiarity with Box.
- Recommended Courses:
  - F121 - IBM Content Navigator 2.0.2: Administration

### **Objectives**

- View Box Content in IBM Content Navigator.
- Add Box Content in IBM Content Navigator.
- Search for Box content in IBM Content Navigator.
- Create and run a Cross Repository Search.
- Configure a Box repository in IBM Content Navigator.

### **Contents**

#### **View Box Content in IBM Content Navigator**

- Browse to Box folders and documents.
- View and edit Box document properties.
- Add and view comments.
- Export Box document properties to a file.

- Preview content in Content Navigator Viewer.
- View Box Notes.

#### Add Box Content in IBM Content Navigator

- Create a Box folder.
- Add a Box document.
- Move a Box document or a folder to another folder.
- Copy a Box document to another repository.
- Share a document from an ECM repository securely through Box.
- Add a Box document to Favorites.
- Check Out and Check In documents.
- Add a Web Link.

#### Search for Box content in IBM Content Navigator

- IBM Content Navigator Search view
- Search options and scope
- Property and Content based search
- Search for Web Links

#### Cross-Repository Search

- Enable Cross-Repository Search
- Create a Cross-Repository Search
- Property Mapping
- Run the Cross-Repository Search

#### Configure a Box repository in IBM Content Navigator

- Configure Box as a repository in Content Navigator.
- Add the Box repository to a Content Navigator desktop.
- Enable Box Share Services for a desktop.
- Configure Box Share and Box Copy for a repository.

---

# Unit 1. IBM Content Navigator and Box Integration

## Estimated time

05:00 hours

## Overview

This unit covers IBM Content Navigator and Box integration. This unit shows how to configure a Box repository, view and add content to it, and search for content.

## How you will check your progress

- Complete Review Questions.

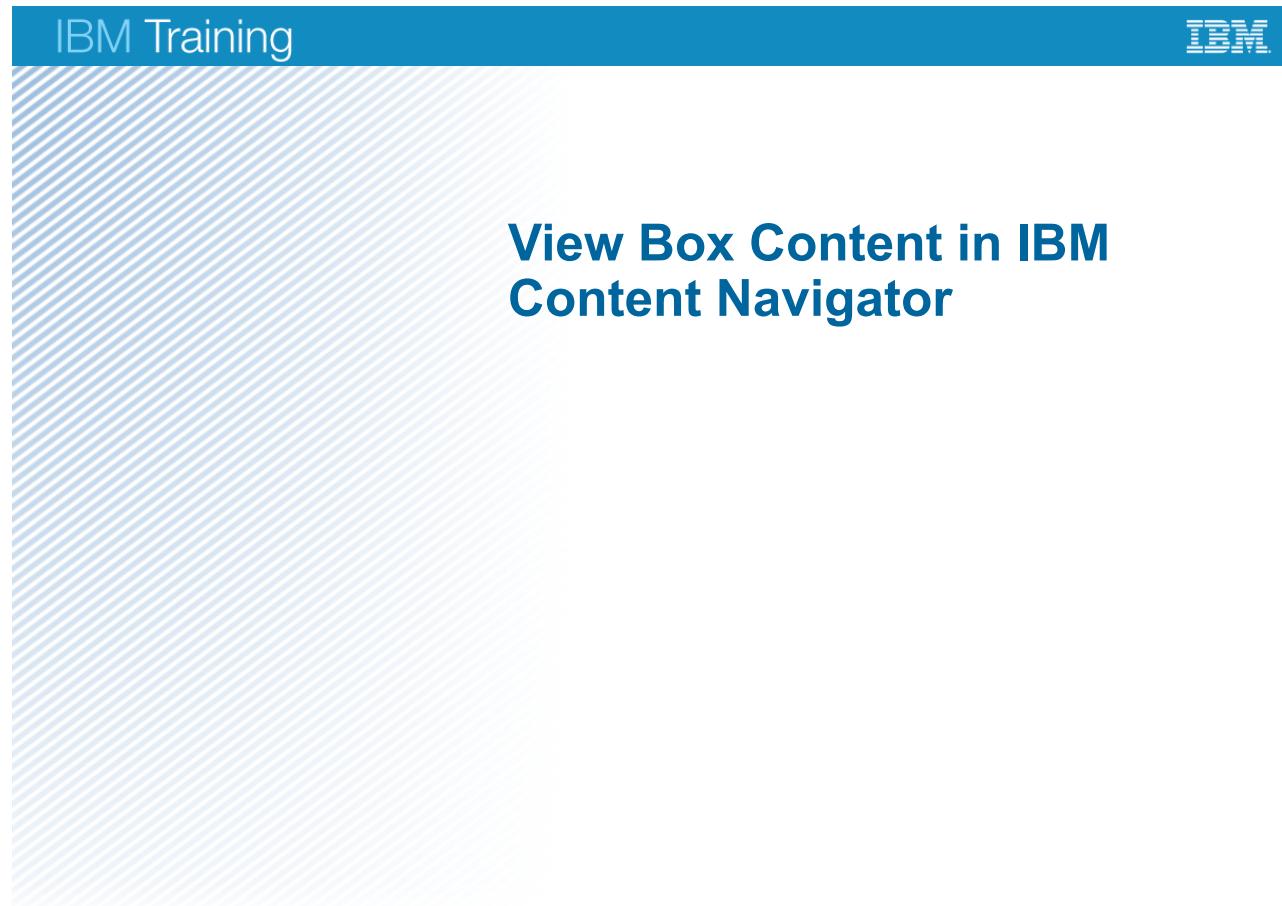
## References

- IBM Redpaper publication: IBM Enterprise Content Management and Box  
<http://www.redbooks.ibm.com/abstracts/redp5230.html?Open>
- Integrating IBM Content Navigator with Box  
<http://www-01.ibm.com/support/docview.wss?uid=swg27046488>
- IBM Content Navigator documentation: Configuring the Email mapping plug-in  
<http://www-01.ibm.com/support/docview.wss?uid=swg27047212>

## Unit objectives

- View Box Content in IBM Content Navigator.
- Add Box Content in IBM Content Navigator.
- Box Search in IBM Content Navigator.
- Cross Repository Search.
- Configure a Box repository in IBM Content Navigator.

## 1.1. View Box Content in IBM Content Navigator



IBM Content Navigator and Box Integration

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*Figure 1-2. View Box Content in IBM Content Navigator*

## Lessons

-  View Box Content in IBM Content Navigator
  - Add Box Content in IBM Content Navigator
  - Box Search in IBM Content Navigator
  - Cross-Repository Search
  - Configure Box repository in IBM Content Navigator

## Why is this Lesson important to you?

- Your company stores documents in Box repository and uses IBM Content Navigator to manage the content.
- To do the tasks effectively, you must be familiar with the features available for viewing Box Content in IBM Content Navigator.
  - Browse to Box folders and documents.
  - View and edit Box document properties.
  - Add and view comments.
  - Export Box document properties to a file.
  - Preview content in Content Navigator Viewer.
  - View Box Notes.

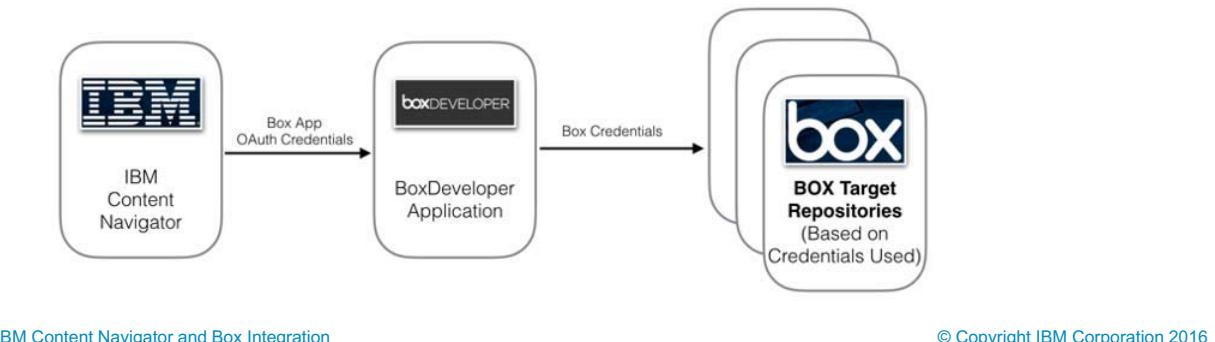
Figure 1-4. Why is this Lesson important to you?

## Lesson objectives

- View Box Content in IBM Content Navigator.

## IBM Content Navigator Box Integration

- IBM Content Navigator allows a view into Box by using a unified user experience.
- Content Navigator supports Box as a repository.
  - Integrated directly to the Box APIs.
  - Seamless user interface and greater capabilities for Box repositories.
- Use case
  - Store some of the content on-premise for legal purposes.
  - Store rest of the content securely on cloud.



IBM Content Navigator and Box Integration

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*Figure 1-6. IBM Content Navigator Box Integration*

IBM Content Navigator enables a uniform way of accessing, sharing, and collaborating on content, using different devices, across diverse content management solutions across the enterprise.

### IBM Content Navigator Box Integration

- IBM integrates directly to the Box APIs in a complete manner when compared to a standard Content Management Interoperability Services (CMIS) connection.
- This direction produces a seamless user interface and greater capabilities for Box repositories.
- IBM Content Navigator creates a unified user experience across on-premise and cloud repositories.
- Box users can continue to work with their Box content in an intuitive way and the familiar features that they know.
- IBM Content Navigator users have the same user experience working with their Box content alongside their enterprise content plus the ability to share their content with external users on the web.

## Box Capabilities available in IBM Content Navigator

- Folders and Documents
- Box Copy
- Box Share
- Metadata
- Document Versions
- Search
- Comments
- Box Notes

IBM Content Navigator and Box Integration

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Figure 1-7. Box Capabilities available in IBM Content Navigator

- Folders and Documents
  - Users can add documents and web links, and create folders directly to Box from within Content Navigator.
- Box Copy
  - Users can copy one or more documents between folders in Box and ECM repositories.
- Box Share
  - Users can share content from FileNet or Content Manager using Box.
- Document Versions
  - Document versions created in Box can be viewed from within IBM Content Navigator.
- Search
  - You can search Box content in IBM Content Navigator.
- Comments
  - You can view and create comments to Box documents in IBM Content Navigator.
- Box Notes

- It is a document creation tool that you can use to take notes, share ideas, and collaborate in real-time from within Box.
- Box Notes can be viewed in the content list from within IBM Content Navigator

The screenshot displays two side-by-side web pages. On the left, the 'IBM Training' header is visible at the top of the browser window. The main content is the 'Log in to IBM Content Navigator with Box' page. It features a dark header bar with 'IBM Content Navigator' and the 'IBM' logo. Below this is a light-colored form area with the heading 'Welcome to IBM Content Navigator'. It contains fields for 'User name:' (containing 'p8admin') and 'Password:' (containing '\*\*\*\*\*'). A blue 'Log In' button is at the bottom. On the right, the 'box' logo is at the top of another browser tab. The main content is titled 'Log in to grant access to Box'. It has fields for 'Email' (containing 'ptraining101@gmail.com') and 'Password' (containing '\*\*\*\*\*'). A blue 'Authorize' button is at the bottom. Below the buttons are links for 'Use Single Sign On (SSO)' and 'Forgot password'.

IBM Content Navigator and Box Integration

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Figure 1-8. Log in to IBM Content Navigator with Box

The screen capture shows logging in to Content Navigator and authorizing with Box.

The Box and IBM Content Navigator secure integration ensures that the right people are accessing the right information.

The screenshot displays two side-by-side interfaces for managing Box files.

**Left Side (IBM Content Navigator):**

- The title bar says "IBM Training".
- The main title is "Browse to Box folders and documents".
- The interface is titled "IBM Content Navigator".
- The navigation pane shows a hierarchy: "EdulCN01" > "BoxForICNFolder" > "EDUTrainingFolder". The "EDUTrainingFolder" item is highlighted with a red border.
- The central area shows a list of files under "EDUTrainingFolder". A red box highlights the list of files:
  - Bamboo.png
  - Box\_CRS\_IBMContent.doc
  - Box\_IBM.txt
  - CRS\_Doc1.doc
  - IBMLogo.png
  - Navigator.txt
  - Ocean Change.png
  - Sample Box Notes.boxnote
  - Second Box Note.boxnote
  - TestDocForBox.txt

**Right Side (Box interface):**

- The title bar says "Box".
- The address bar shows the URL: "https://app.box.com/files/0/f/67430?".
- The search bar contains "EDUTrainingFolder".
- The file list shows the same set of files as the IBM Content Navigator interface, each with its upload date, size, and a link to view or edit the file.

IBM Content Navigator and Box Integration

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Figure 1-9. Browse to Box folders and documents

The screen capture shows the Box folders and documents in Box and in IBM Content Navigator. You can browse to all the Box folders and documents in Content Navigator.

## Box documents - Three types of metadata

- File
  - Name, Description, Owner, Size, Date Created, and Date Modified.
  - Present on all Box documents.
- Template (optional)
  - A Box administrator configures Templates and applies to documents.
  - Contain a set of properties, similar to classes and item types in other repositories.
  - Can contain string, numeric, date, and string choice list properties.
  - Can apply multiple templates to a document.
- Custom (optional)
  - Ad hoc properties added to documents.
  - String data types only.

Figure 1-10. Box documents - Three types of metadata

Box documents can have up to three types of metadata.



## Box documents - View and edit metadata in Content Navigator

- View
  - Can view metadata in Content Navigator > Properties page.
- Edit
  - Can edit the file name and description.
  - Cannot edit the System Properties.
    - Example: Owner, Size, Date Created, and Date Modified.

Properties	Comments	Versions
<b>Properties</b>		
<b>*Name:</b> ?	Ocean Change	
<b>Description:</b> ?	You can change the description	
<b>System Properties</b>		
Owned By:	Product Training	
Content Size:	970 KB	
Created By:	Product Training	
Created On:	3/7/2016, 6:38 PM	
Modified By:	Product Training	
Modified On:	3/7/2016, 6:38 PM	
Content Created On:	3/7/2016, 6:04 PM	
Content Modified On:	3/7/2016, 6:04 PM	
ID:	56129588730	
Version:	1	
MIME Type:	image/png	

IBM Content Navigator and Box Integration

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Figure 1-11. Box documents - View and edit metadata in Content Navigator

The screen capture shows the Properties page for a Box document in IBM Content Navigator.



## Box documents - Add comments in IBM Content Navigator

- View and Add Comments

- For a Box document in Content Navigator > Properties page > Comments tab.

The screenshot shows two windows side-by-side. On the left is the 'Properties' page for a Box document, with the 'Comments' tab selected (highlighted by a red box). Below the tab are three comments listed:

- Adding a comment. This can be viewed in Box.  
Product Training 3/7/2016, 7:44 PM
- Add another comment.  
Product Training 4/12/2016, 7:15 PM
- Comment added from Box. This can be viewed in Content Navigator.  
Product Training 4/12/2016, 11:05 PM

At the bottom of the comments section is a text input field with a red border containing the placeholder "Enter your comment here.".

On the right is a modal dialog titled "Properties" with a dark background. It contains the text: "You can view or edit the properties of this item. If you have the appropriate permissions, you can also modify the security of the item. However, you cannot change the system properties." At the bottom of the dialog are three buttons: "Open", "Save", and "Cancel".

IBM Content Navigator and Box Integration

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*Figure 1-12. Box documents - Add comments in IBM Content Navigator*

The screen capture shows the Properties page > Comments tab for a Box document in IBM Content Navigator.

You can add comments for a Box document in Content Navigator and view them in Box interface.

You can view the comments added through Box interface in Content Navigator.



## Document Versions

- The versions of a Box document are shown in the Properties page > Versions tab.

The screenshot shows the 'Properties' page for a Box document. The 'Versions' tab is selected, indicated by a red box around its title. The table displays two versions of files: 'Snow.jpg' (version 2) and 'PlantBush.png' (version 1). The properties for each version are listed: Name, Version, Created On, Modified By, and Modified On. A detailed description of the item is visible on the right side of the screen.

	Name	Version	Created On	Modified By	Modified On
	Snow.jpg	2	3/8/2016, 5:00 PM	Product Training	3/8/2016, 5:44 PM
	PlantBush.png	1	3/8/2016, 5:00 PM	Product Training	3/8/2016, 5:00 PM

IBM Content Navigator and Box Integration

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Figure 1-13. Document Versions

The screen capture shows the Properties page > Version tab for a Box document in IBM Content Navigator.

Document Versions that are created in Box can be viewed from within IBM Content Navigator in the following areas:

- Content List
- Properties view
- Properties Dialog > Version tab.

**IBM Training**

**Export Properties**

- In IBM Content Navigator, you can export Box document properties to a file.

**Export menu**

The screenshot shows the IBM Content Navigator interface. On the left is a navigation bar with icons for Home, Refresh, Add Document, and a search bar. The main area displays a tree view of a folder structure under 'EdulCN01'. A right-click context menu is open over a folder named 'EDUT'. The menu items are: Open, Preview, Properties, Download, Add to Favorites, Export (which is highlighted with a red box), and Delete.

**Save the properties.csv file.**

A Firefox dialog box titled 'Opening properties.csv' is shown. It contains the following text:  
You have chosen to open:  
**properties.csv**  
which is: Microsoft Excel Comma Separated Values File  
from: https://169.45.98.111:9443  
What should Firefox do with this file?  
An 'Open with' dropdown menu is set to 'Microsoft Excel (default)'. Two radio button options are available: 'Open with' (selected) and 'Save File'. There is also a checkbox for 'Do this automatically for files like this from now on.'

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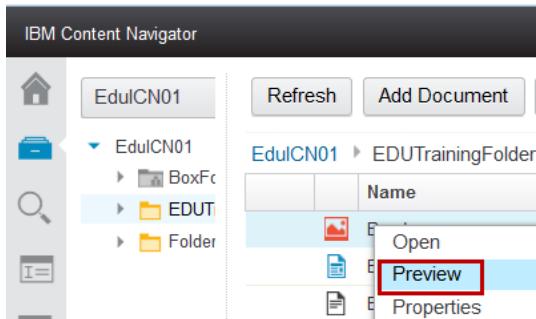
*Figure 1-14. Export Properties*

The screen capture shows the Export menu in IBM Content Navigator and the export of Box document properties.

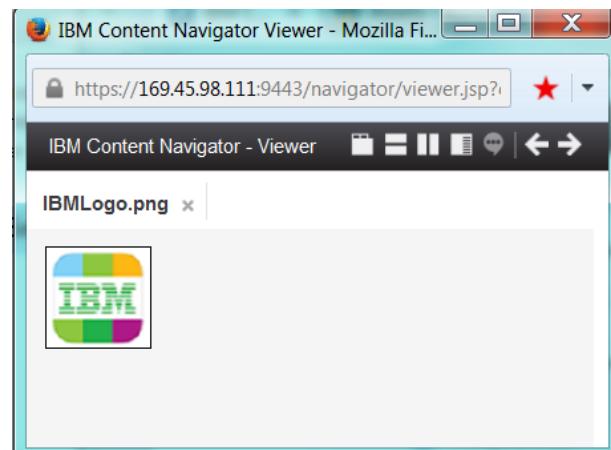
# IBM Training

## Preview a Box document in Content Navigator

### Preview menu



Preview of a Box document in IBM Content Navigator viewer.



IBM Content Navigator and Box Integration

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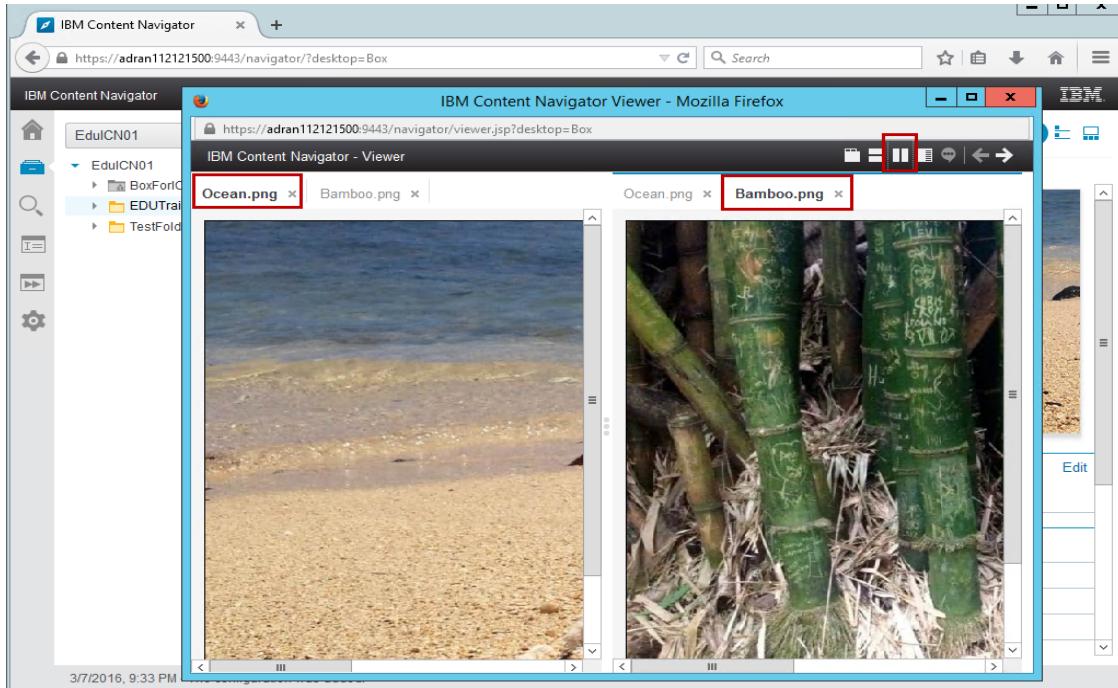
Figure 1-15. Preview a Box document in Content Navigator

The screen captures show the Preview menu and the preview of a Box document in IBM Content Navigator Viewer.



## View two Box documents

- View the documents side by side in the same Content Navigator viewer page.



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Figure 1-16. View two Box documents

The screen capture shows that two Box documents opened side by side in the same IBM Content Navigator Viewer window.



## Box Notes

- Open Box Notes in IBM Content Navigator.
  - Right-click the Box Notes document and select Open.
  - When a user opens a Box Note for the first time, the user needs to log on to Box.
  - Subsequent Opening of Box Notes in the same browser session does not require another logon to Box.

The screenshot shows the IBM Content Navigator interface. The left sidebar displays a navigation tree with a folder named 'EdulCN01' expanded, showing subfolders 'BoxFc', 'EDUT', and 'Folder'. The main content area shows a list of files under 'EdulCN01 > EDUTrainingFolder'. The list includes:

Name	Content Size	Modified By
Second Box Note.boxnote	1 KB	Product Train
<b>Sample Box Notes.boxnote</b>	2 KB	Product Train
Box_IBM.txt	1 KB	Product Train
Navigator.txt	1 KB	Product Train
TestDocForBox.txt	1 KB	Product Train
IBMLogo.png	7 KB	Product Train
Box_CRS_IBMContent.doc	22 KB	Product Train

A properties panel on the right is open for the selected file 'Sample Box Notes.boxnote'. It shows the following details:

- Name: Sample Box Notes.boxnote
- Description: Box Notes with some text to view in ICN.

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Figure 1-17. Box Notes

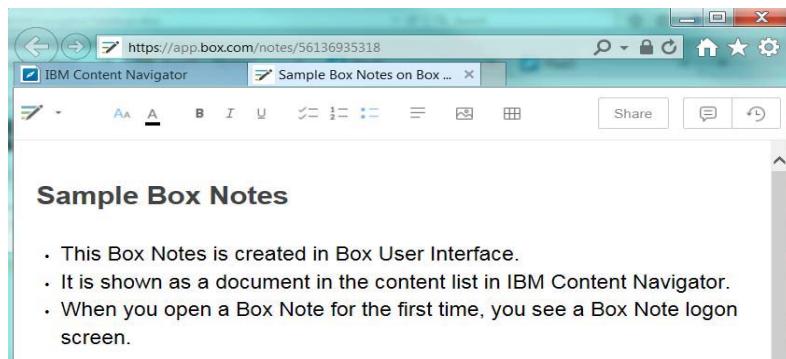
The screen capture shows the Box Notes list in Content Navigator.

**IBM Training**

**Open Box Notes**

- When a user opens a Box Note for the first time in Content Navigator, the user gets a Box logon screen.

- After logon, the Box Note is opened in a new browser tab.



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*Figure 1-18. Open Box Notes*

The screen captures show the Box Logon screen and a sample Box Notes.



## Box Authentication: Box Account Linking

- Once authenticated for Box, the system remembers.
- All future connections are automatic.
- To Disconnect, use the Content Navigator user menu.

A screenshot of the IBM Content Navigator interface. At the top, there's a navigation bar with icons for Home, Recent, Search, and Settings. The main area shows a folder structure under "EduICN01". A context menu is open over the "Actions" button, listing "Change Language and Locale Settings", "Disconnect Box Account: Product Training" (which is highlighted with a red box), and "Log Out". Below the menu, a table displays three folders with their names, sizes, and modified by users.

	Name	Content Size	Modified By
BoxForICNFolder	32 KB	My Collaboration Team	
EDUTrainingFolder	2.1 MB	Product Training	
FolderAddedFromICN	2.9 MB	Product Training	

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Figure 1-19. Box Authentication: Box Account Linking

The screen capture shows the Content Navigator user menu. Disconnect Box account option is highlighted.

## Demonstrations

- View Box Content in IBM Content Navigator.
  - Click the link in the notes area to access the demonstration.



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*Figure 1-20. Demonstrations*

If you are taking this course as a self-paced virtual course, return to the main course menu to play the pre-recorded demonstrations.

Link to the “View Box Content in IBM Content Navigator” demonstration:

[http://ibm.biz/f272g\\_u01\\_l01\\_d01](http://ibm.biz/f272g_u01_l01_d01)

## Review questions

1. Which of the following two properties of a Box document are editable?
  - A. Name
  - B. Description
  - C. ID
  - D. MIME type
  
2. True or False:  
You can export Box document properties to a file in IBM Content Navigator.
  
3. True or False:  
You cannot add comments for Box documents in IBM Content Navigator.



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Figure 1-21. Review questions

Write your answers here:

- 1.
- 2.
- 3.

## Review answers

1. Which of the following two properties of a Box document that are editable?

- A. Name
- B. Description
- C. ID
- D. MIME type

The answer is A and B.



2. True or False:

You can export Box document properties to a file in IBM Content Navigator.

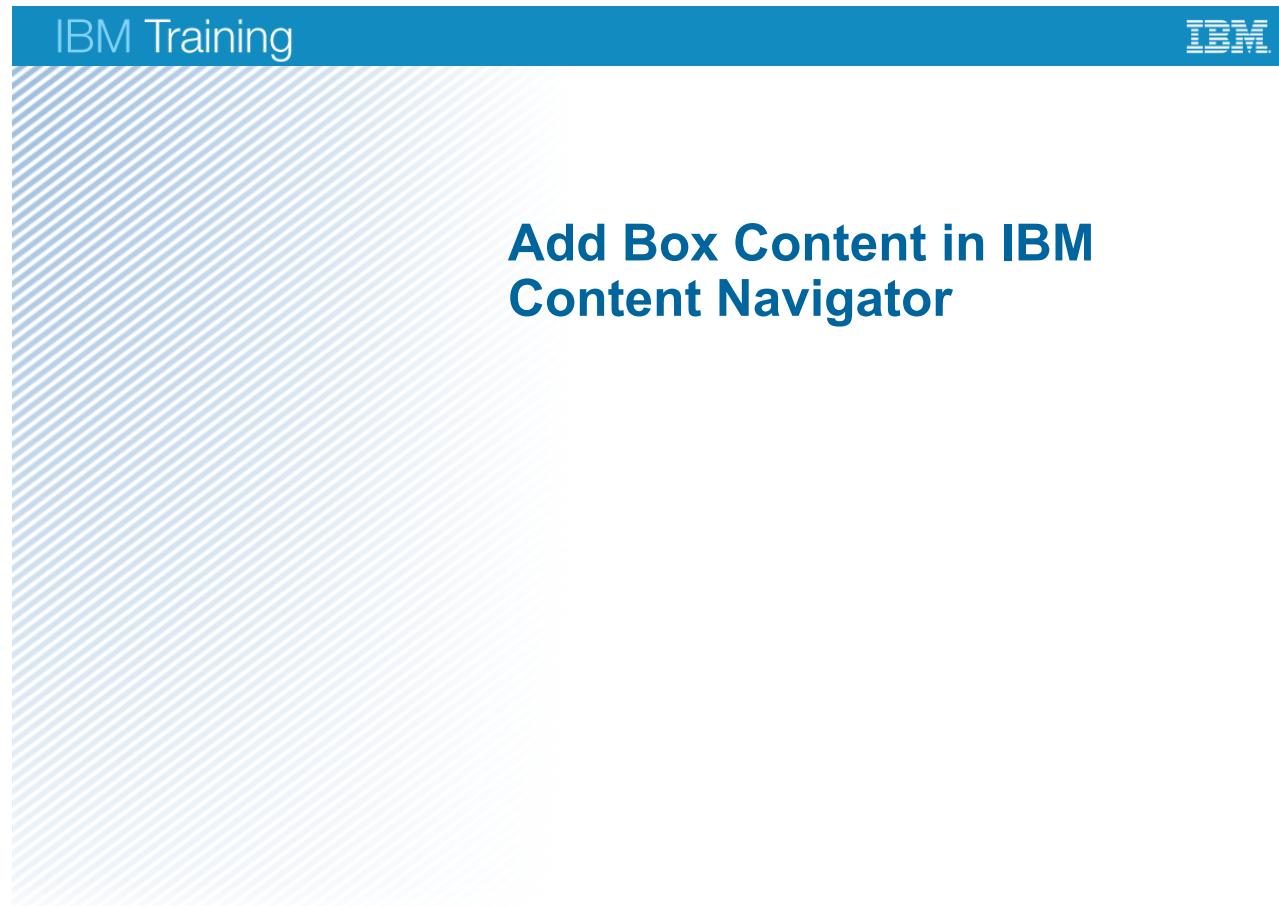
The answer is True.

3. True or False:

You cannot add comments for Box documents in IBM Content Navigator.

The answer is False.

## 1.2. Add Box Content in IBM Content Navigator



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*Figure 1-23. Add Box Content in IBM Content Navigator*

## Lessons

- View Box Content in IBM Content Navigator
-  Add Box Content in IBM Content Navigator
- Box Search in IBM Content Navigator
- Cross-Repository Search
- Configure Box repository in IBM Content Navigator

## Why is this Lesson important to you?

- Your company stores documents in Box repository and uses IBM Content Navigator to manage the content.
- To do the tasks effectively, you must be familiar with the features available for adding Box Content in IBM Content Navigator.
  - Create a Box folder.
  - Add a Box document.
  - Move a Box document or a folder to another folder.
  - Copy a Box document to another repository.
  - Share a document from an ECM repository securely through Box.
  - Add a Box document to Favorites.
  - Check Out and Check In documents.
  - Add a Web Link.

Figure 1-25. Why is this Lesson important to you?

## Lesson objectives

- Add Box Content in IBM Content Navigator.

The screenshot displays two overlapping interfaces. The top interface is the 'IBM Content Navigator' showing a tree view of 'EdulCN01' with folders like 'BoxForICNFolder', 'EDUTrainingFolder', and 'FolderAddedFromICN'. A 'New Folder' button is visible. The bottom interface is a 'Box repository' window titled 'New Folder' where a user is creating a new folder named 'FolderAddedFromICN'. After saving, the new folder appears in the 'EdulCN01' list, highlighted with a red box and an arrow pointing from the 'New Folder wizard' window.

The new folder is listed.

New Folder wizard in IBM Content Navigator.

	Name	Content Size
BoxForICNFolder	32 KB	
EDUTrainingFolder	2.1 MB	
<b>FolderAddedFromICN</b>	<b>2.9 MB</b>	

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Figure 1-27. Create Box folders in IBM Content Navigator

The screen captures show the New Folder wizard and Folders list in IBM Content Navigator. You can:

- Create Box folders in Content Navigator and view them in Box interface.
- View the folders created through Box interface in Content Navigator.



## Add Box documents in IBM Content Navigator

The figure consists of two screenshots. The top screenshot shows the 'Add Document' wizard in IBM Content Navigator. It has a 'General' section where 'Save in' is set to 'Box folder' (highlighted with a red box), 'File name' is 'Snow.jpg', and 'Name' is 'Snow'. The bottom screenshot shows the 'IBM Content Navigator' interface with a document list. A file named 'Snow.jpg' is highlighted with a red box and labeled 'The new document is listed.' with a red arrow pointing to it.

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Figure 1-28. Add Box documents in IBM Content Navigator

The screen captures show the Add Document wizard and the document list in IBM Content Navigator. You can:

- Add Box documents in Content Navigator and view them in Box interface.
- View the documents added through Box interface in Content Navigator.



## Copy a Box document to another repository in IBM Content Navigator

- The repository must be Box Copy enabled.

**Box Copy**  
To add a new document, select the repository and folder. To check in a new version, select the repository and document.

**ICMTARGET**

Filter

Banking  
Box demo documents  
Box templates  
Customer Contracts  
DocsFromBox  
Emergency Procedures

After the copy completes, delete the selected item(s) from Box.

Copy Cancel

EdulCN01 > FolderAddedFromCN

Name
TestFolder
Lighthouse.jpg
Mountain.png
S
S
S

Open  
Preview  
Properties  
Download  
Add to Favorites  
Export  
Delete  
Check Out  
Check In  
Cancel Check Out  
Box > Copy  
Folders

IBM Content Navigator and Box Integration

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Figure 1-29. Copy a Box document to another repository in IBM Content Navigator

The screen captures show the Box > Copy menu option for a Box document in IBM Content Navigator. You copy a Box document to another ECM repository folder.

Steps to copy a Box document to another repository (Example in this screen capture: ICMTARGET) in IBM Content Navigator.

- Right-click a Box document.
- Select Box > Copy from the menu.
- In the "Box Copy" page, select the repository and the folder where you want to copy the document.  
In case, if you are copying the Box document as a new version of an existing document in this repository, then select that document.
- You can optionally select to delete the Box document after the copy completes.
- When you click "Copy", Add Document wizard opens. Complete the wizard.
- The Box document is copied as a new document in the other repository.

**Use case for Copy:**

Users, when working at a customer location, can collaborate on a document with a customer using the Box App on a tablet. They can copy that document to a FileNet repository from within Content Navigator later. The document, that is copied to FileNet or Content Manager, can then be included as part of a process and stored as the document of record.



## Share a document from an ECM repository securely through Box

- The repository must be Box Share enabled.

The screenshot illustrates the process of sharing a document from an ECM repository through Box. On the left, a 'Box Share' dialog box is open, showing fields for 'Send from' (sender@mail.com) and 'Send to' (receiver@mail.com), both highlighted with red boxes. A message box contains the text: 'I'd like to share my file with you on Box.' Below this, 'Share Options' are set to allow download, with a date set for expiration (4/30/2016) and a password entered. On the right, a context menu for a document in the ECM repository is displayed, with the 'Box' option selected and its submenu open, showing 'Share' as another option. Red arrows point from the 'Send to' field in the dialog to the 'Share' option in the context menu, and from the 'Shared' status indicator in the ECM repository list to the 'Share' option in the context menu. The ECM repository list shows two items: 'Logo Company Invoice.pdf' (144 KB, P8Admin) and 'MPS Bid.docx' (30 KB, P8Admin). The 'Logo Company Invoice.pdf' item has a 'Shared' status indicator.

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Figure 1-30. Share a document from an ECM repository securely through Box

### Help path

IBM Content Navigator documentation: Configuring the Email mapping plug-in

<http://www-01.ibm.com/support/docview.wss?uid=swg27047212>

The screen captures show the Box > Share menu option for a document in IBM Content Navigator. You share a document from an ECM repository to an external user through Box.

Sharing a document includes copying the file to Box, creating a link, and sending the link in email.

- The process of sharing a document copies it to a hidden shared folder in Box where a read-only copy is made available to whomever has the link.
- The only user who has access to the document in Box is the administrator account that is assigned to manage Box shares.
- When sharing is complete, the recipient is notified through email and provided a link to access the document.
- By default, only the current version is shared.
- Sharing is an asynchronous process - the process takes place in the background. This allows the user to continue to work while the sharing process occurs.

## Use case for Box Share

An ECM user needs to allow an external participant to view (read-access only) selected documents stored in an ECM repository securely.

The user selects the document in the ECM repository and initiates a Share action. This action first copies the document to Box, then uses the sharing function from Box to send a secure link of document through email to the external participant. The Share action can be invoked directly from either Content Navigator interface. The following options, that are supported by Box, are also available directly in IBM Content Navigator:

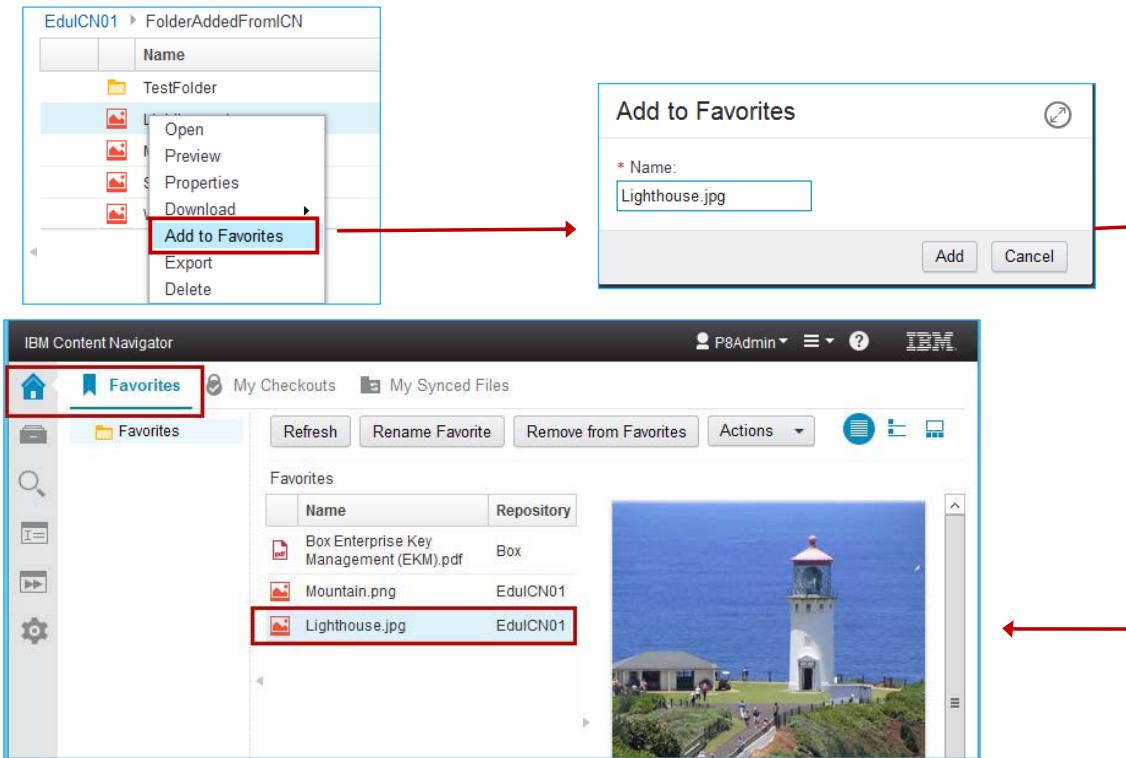
- Define password
- Expiration time
- Download permission

Steps to share a document from an ECM repository in IBM Content Navigator.

1. Browse to the repository from where you want to share a document.
2. Right-click a document.
3. Select Box > Share from the menu.
4. In the "Box Share" page, enter the email addresses for the sender and receiver. Include a message.
5. In the Share Options section, you can configure the following options:
  - Allow download
  - Set an expiration date for the link (or select "Never expires option").
  - Set a password
6. Click Share.
7. The document is shared as indicated by the share icon.



## Add a Box document or a Box folder to IBM Content Navigator Favorites



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Figure 1-31. Add a Box document or a Box folder to IBM Content Navigator Favorites

The screen captures show adding a Box document to IBM Content Navigator Favorites. You can also add a Box Folder to Favorites.

1. Right-click a Box document or a Box Folder.
2. Select "Add to Favorites" from the menu.
3. In the "Add to Favorites" window, optionally, edit the name.
4. The document is added to the Favorites. You can access the document from the Favorites (Home icon) view.



## Check out and Check in a Box document in Content Navigator

The figure consists of three screenshots illustrating the check out and check in process for a Box document in IBM Content Navigator.

- Screenshot 1:** Shows a file list with a context menu open over a document. The "Check Out" option is highlighted, showing a submenu with "Check Out and Download" and "Check Out Only".
- Screenshot 2:** Shows the same file list after a check out has been performed. The context menu now shows "Check In" and "Cancel Check Out".
- Screenshot 3:** Shows the "Versions" tab of a document's properties. It displays two versions: "Snow.jpg" (Version 2, created 3/8/2016, modified 3/8/2016, by Product Training) and "PlantBush.png" (Version 1, created 3/8/2016, modified 3/8/2016, by Product Training).

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Figure 1-32. Check out and Check in a Box document in Content Navigator

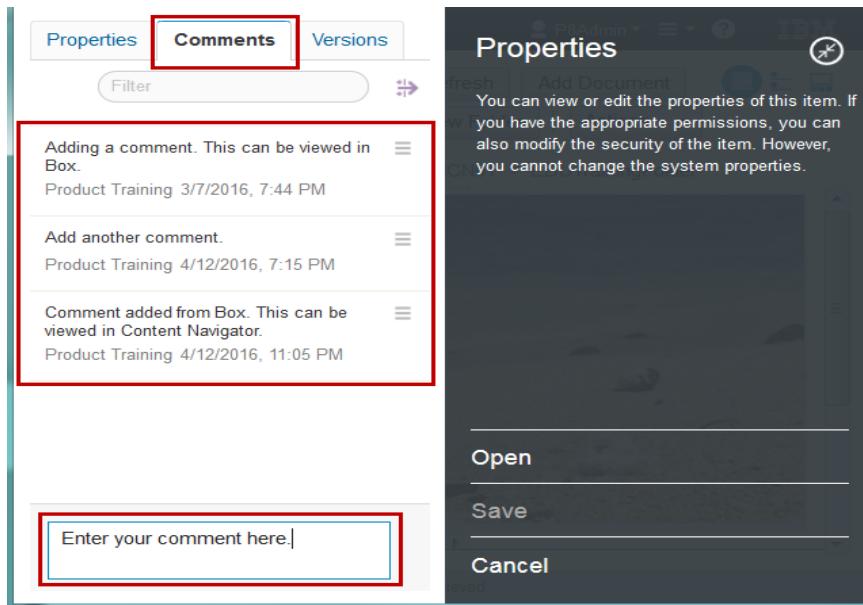
The screen captures show the Check out and Check in menu options and version information for a Box document in IBM Content Navigator.

1. Right-click a document.
2. Select "Check Out" to check out a document for editing.
3. After the edits, select "Check In" from the menu. Complete the steps to check in a new version for the document.
4. The Properties page for the document shows the version information.
5. The document version is automatically updated on the Box interface.



## Box documents - Add comments in IBM Content Navigator

- Box document in Content Navigator > Properties page > Comments tab.



IBM Content Navigator and Box Integration

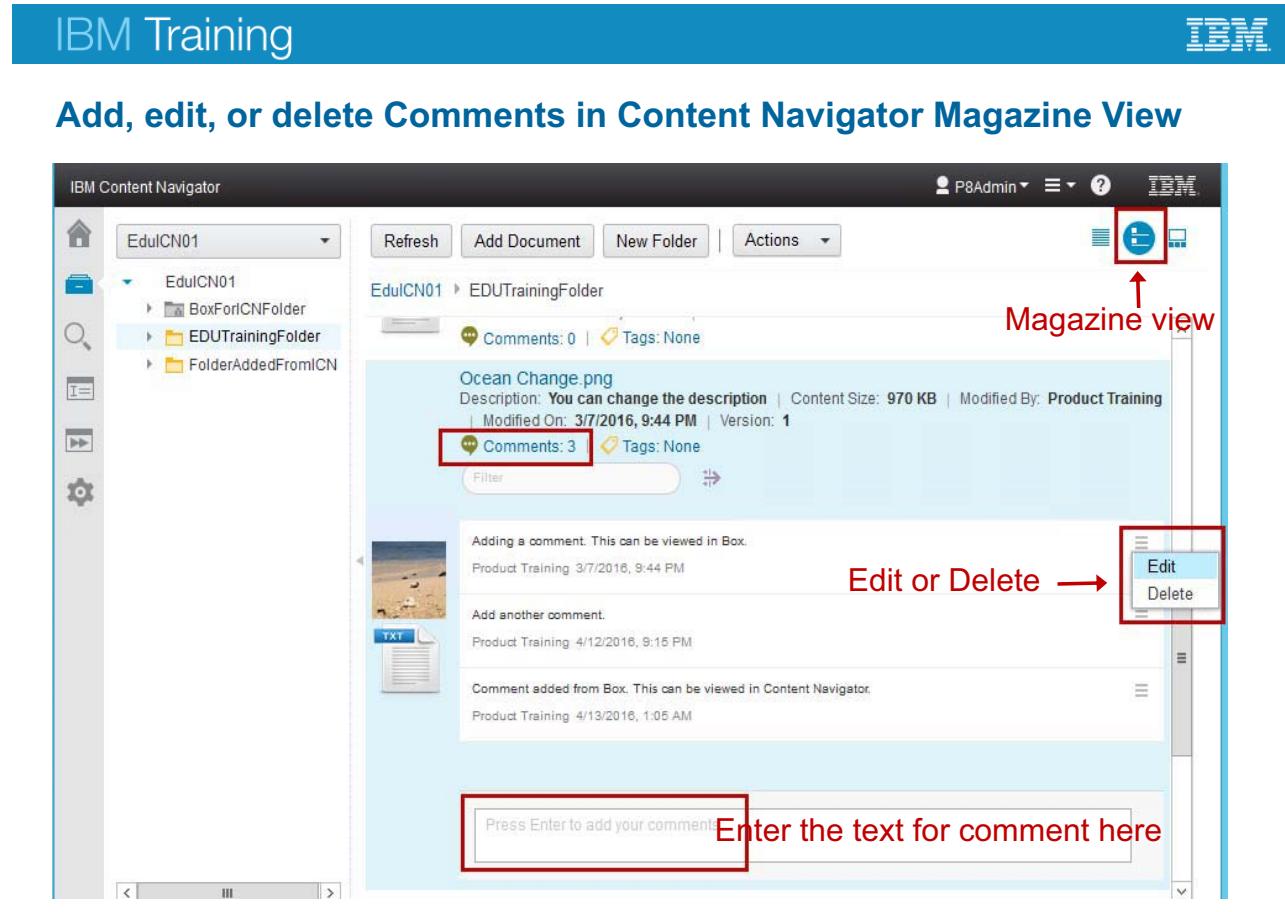
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Figure 1-33. Box documents - Add comments in IBM Content Navigator

The screen capture shows the Properties page > Comments tab for a Box document in IBM Content Navigator.

You can add comments for a Box document in Content Navigator and view them in Box interface.

You can also view the comments added through Box interface in Content Navigator.



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Figure 1-34. Add, edit, or delete Comments in Content Navigator Magazine View

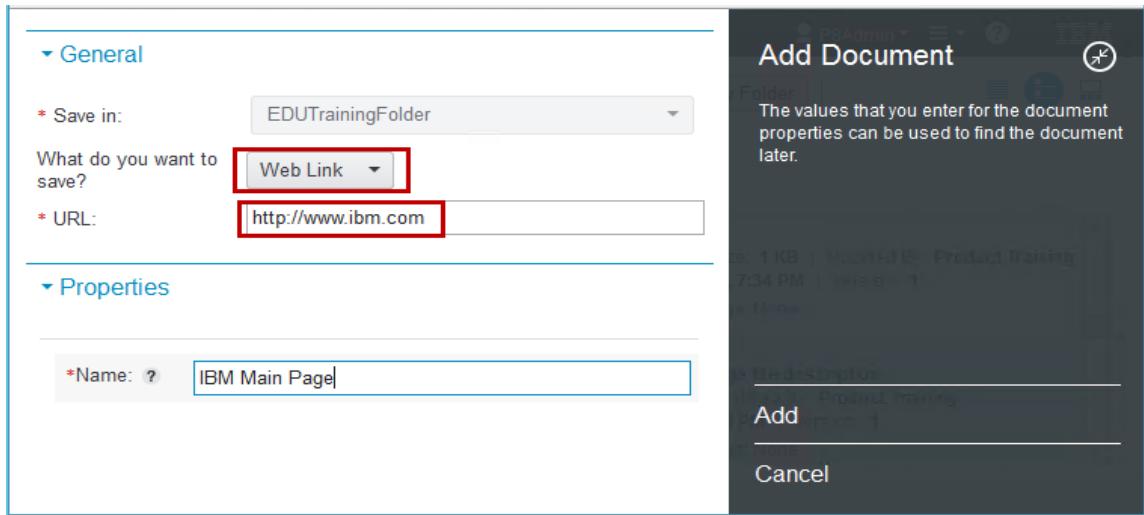
The screen capture shows a list of comments for a Box document in IBM Content Navigator > Magazine View.

You can add, edit, or delete Comments in this Magazine View.



## Add a Web Link

- External content can be added to Box in Add Document wizard.
- Select Web Link as the content type.
- Enter the URL for the external content.
- The URL must start with ftp, http, or https



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Figure 1-35. Add a Web Link

The screen capture shows adding a web link in IBM Content Navigator.



## View and open a Web Link

- A Web Link has no content (No value for the Content Size property)

The screenshot shows the IBM Content Navigator interface. On the left, there's a navigation tree with a folder structure: EdulCN01 > BoxForICNFolder > EDUTrainingFolder > TestFolder. Inside TestFolder, there are three items: 'IBM Main Page' (highlighted with a red box), 'Sample Box Notes.boxnote', and 'CRS\_Doc1.doc'. The 'IBM Main Page' item has a red box around its 'Content Size' column, which is empty. To the right, a properties panel shows the details for 'IBM Main Page': Name is 'IBM Main Page' and URL is 'http://www.ibm.com/'. A red arrow points from the text 'Double-click the Web Link, and it opens the URL page.' to the 'IBM Main Page' entry in the list.

Name	Content Size
IBM Main Page	
Sample Box Notes.boxnote	22 KB
CRS_Doc1.doc	1 KB

**Properties**

Name:	IBM Main Page
URL:	http://www.ibm.com/

Double-click the Web Link, and it opens the URL page.

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Figure 1-36. View and open a Web Link

The screen capture shows a web link listed in IBM Content Navigator. It has no content and does not have a value for the Content Size property.

## Demonstrations

- Add Box Content in IBM Content Navigator.
  - Click the link in the notes area to access the demonstration.



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*Figure 1-37. Demonstrations*

If you are taking this course as a self-paced virtual course, return to the main course menu to play the pre-recorded demonstrations.

Link to the "Add Box Content in IBM Content Navigator" demonstration:  
[http://ibm.biz/f272g\\_u01\\_l02\\_d01](http://ibm.biz/f272g_u01_l02_d01)

## Review questions

1. Which of the following actions available for a Box document in the IBM Content Navigator user interface? Select all that apply.
  - A. Add a document.
  - B. Create a compound document.
  - C. Check Out and Check In a document.
  - D. Add a document to Favorites.
  
2. True or False:  
You cannot add external content to Box in the IBM Content Navigator user interface.
  
3. True or False:  
You can create a Box folder in the IBM Content Navigator user interface.



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Figure 1-38. Review questions

Write your answers here:

- 1.
- 2.
- 3.

## Review answers

1. Which of the following actions available for a Box document in the IBM Content Navigator user interface? Select all that apply?

- A. [Add a document.](#)
- B. Create a compound document.
- C. [Check Out and Check In a document.](#)
- D. [Add a document to Favorites.](#)

The answer is A, C, and D.



2. True or [False](#):

You cannot add external content to Box in the IBM Content Navigator user interface.

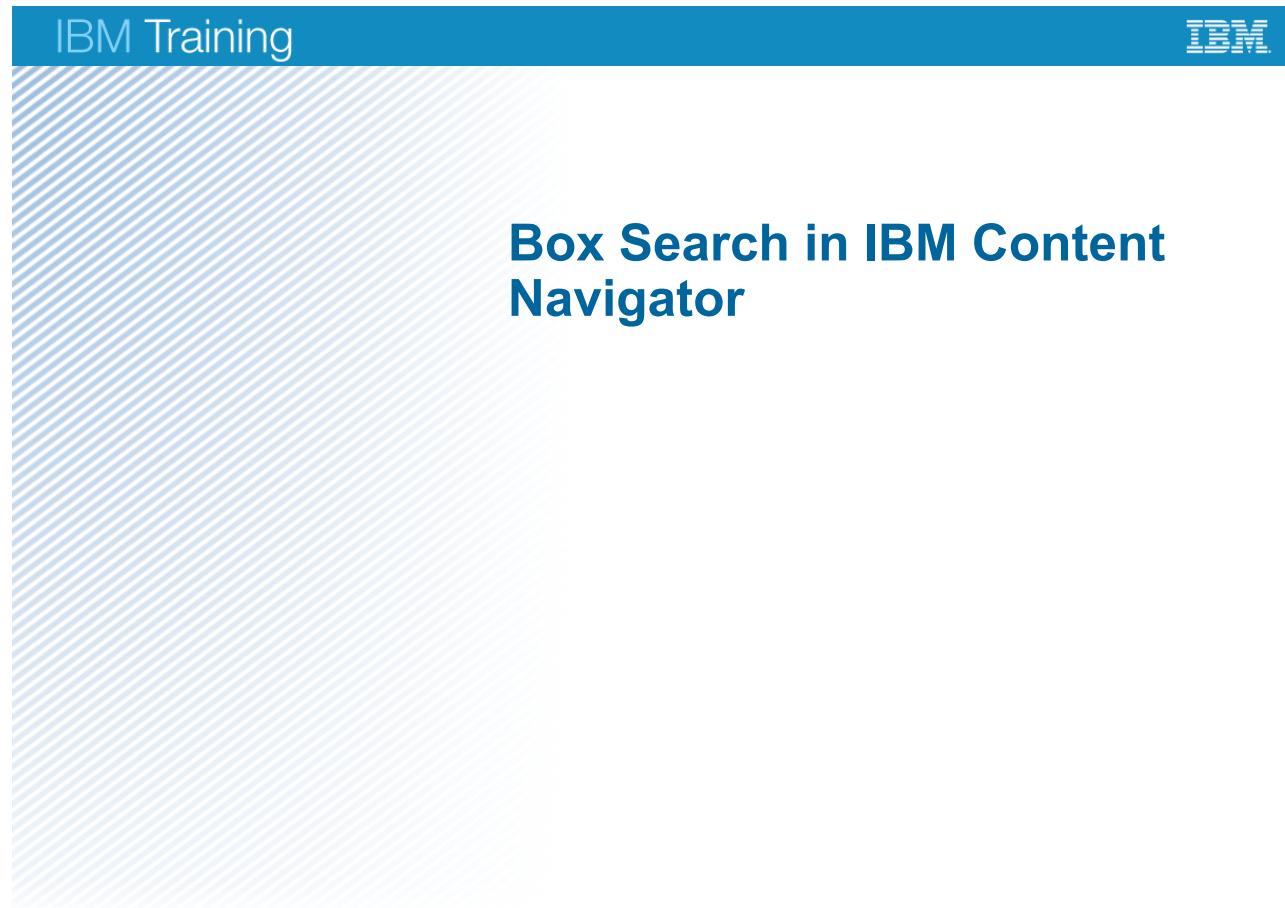
The answer is [False](#).

3. [True](#) or False:

You can create a Box folder in the IBM Content Navigator user interface.

The answer is [True](#).

## 1.3. Box Search in IBM Content Navigator



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*Figure 1-40. Box Search in IBM Content Navigator*

## Lessons

- View Box Content in IBM Content Navigator
- Add Box Content in IBM Content Navigator
- Box Search in IBM Content Navigator
  - Cross-Repository Search
  - Configure Box repository in IBM Content Navigator

## Why is this Lesson important to you?

- Your company stores documents in Box repository and uses IBM Content Navigator to manage the content.
- To do the tasks effectively, you must be familiar with searching for Box content in IBM Content Navigator.

Figure 1-42. Why is this Lesson important to you?

## Lesson objectives

- Box Search in IBM Content Navigator.



## Search for Box content in Content Navigator

- Find documents, web links, and folders in Box repositories.

The screenshot shows the IBM Content Navigator interface. On the left, there's a sidebar with icons for Home, Box (selected), New Search, and other navigation options. A red box highlights the 'Search' icon. The main area is titled 'New Search' and contains a 'Search Criteria' section. It includes a dropdown for 'Search in:' set to 'Box', a search bar for terms, and a scope dropdown set to 'Everything'. There are also filters for 'Created On', 'Modified On', and 'Owned By'. At the bottom are 'Search', 'Reset', 'Cancel', and 'Results Display' buttons, along with a checkbox for 'Keep search criteria open'.

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*Figure 1-44. Search for Box content in Content Navigator*

The screen capture shows the Search feature in Content Navigator. Using this feature, you can search for content in Box repository.

- When you access Box repository in Search view, Content Navigator automatically opens a New Search.
  - No need to click New Search.
  - The Box Search Builder is similar to other repository search.
  - Some features are unique to Box repository. Example: Only Box has a "Box Note" file type.



## Box Search Criteria: Repository Folder and Type of item

- By default, Content Navigator searches the entire Box repository.
- You can limit the search to a:
  - Specific folder (including subfolders).
  - Type of item (documents or files, folders, web links, or all item types)

The screenshot shows the 'New Search' dialog in IBM Content Navigator. The 'Search Criteria' tab is active. In the 'Search in:' field, the path '\EduICN01\EDUTrainingFolder' is entered. A red box highlights this field. In the 'File type filter:' dropdown, 'Documents' is selected, also highlighted with a red box. Other options in the dropdown include 'Folders', 'Web Links', and 'Documents, Folders, and Web Links'. The 'Content size filter:' dropdown shows 'Any content size'. At the bottom, there are 'OK' and 'Cancel' buttons.

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*Figure 1-45. Box Search Criteria: Repository Folder and Type of item*

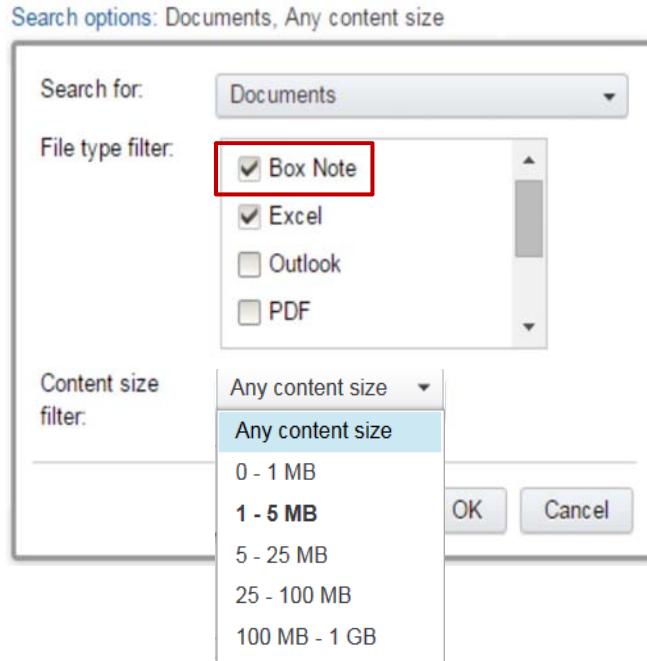
The screen capture shows a New Search tab in IBM Content Navigator. You can limit the search to specific folders in Box repository.

- With the search options, you can further narrow the search to a particular type of item.  
Examples: Documents or files, web links, folders, or all item types.

## Box Search Criteria: File type and Content size filters

Filter search results by:

- File types
  - New built-in file type for Box Notes
  - Available for documents search option only
- Content size
  - Select from a list of size ranges
  - Available for documents or folders search options only



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Figure 1-46. Box Search Criteria: File type and Content size filters

The screen capture shows the Search Filters available for Box documents in IBM Content Navigator.

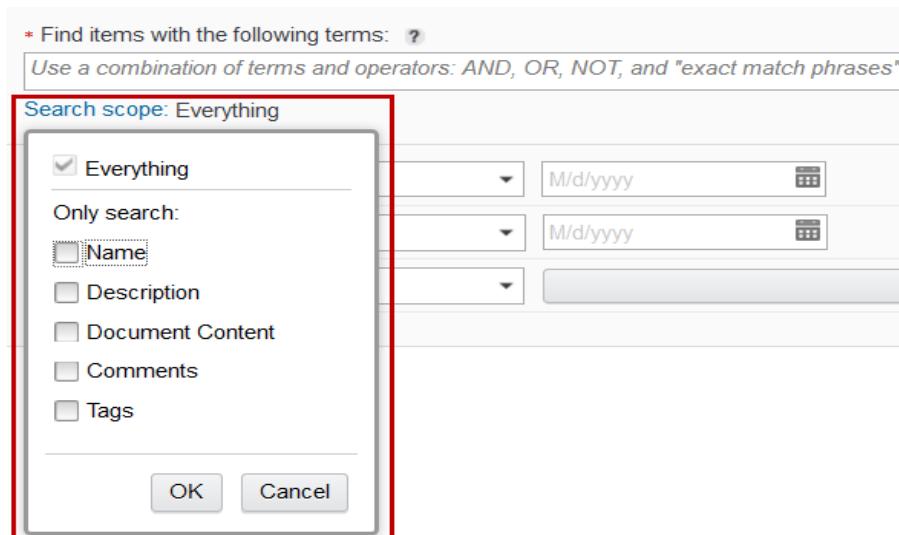
With the search options, you can set filters for file type and content size.

- File types are a set of MIME types, which can be configured in Administration Settings.  
Example: Box Note, Excel, Outlook, and PDF
- For the content size, you can search for content between 1 MB and 1 GB.



## Box Search: Scope

- Search across text content and indexed properties
  - Name, description, comments, tags, custom properties, and template metadata
- Narrow the search to one or more of the following items:
  - Name, description, document Content, comments, or tags



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Figure 1-47. Box Search: Scope

The screen capture shows the Search scope for Box content.

Available search scope options depend on the type of items you search.

Example: For the "Web Links", the available search scope options are: name and description only.

## Box Search: Content Based Search

- Search with terms.
  - Box implicitly includes trailing wildcards.
  - Box does not support wildcards such as asterisk (\*) or question mark (?).
- Search with phrases.
- Search with Boolean operators: AND, OR (default), and NOT.

Searching for	Results in items that contain
Training AND Development	Training and Development
Training OR Development	Training or Development
Training NOT Development	Training, but not Development

- Search is case-insensitive.
- Text criteria is required to run a search.
- Items added to Box takes up to 10 min to become available for search.
  - Box search engine fully indexes the Box items.

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Figure 1-48. Box Search: Content Based Search

### Search with terms

- Searching for Human Resources results in items that contain either Human or Resources.
- Box implicitly includes trailing wildcards. Example: Searching for Flower results in items with the words Flower or Flowers or Flowering.

### Search with phrases (words within double quotation marks)

- Searching for "Sociology 101" results in items that contain History and Sociology 101, but not Sociology and History 2015

### Search with Boolean operators: AND, OR (default), and NOT

- Searching for Training AND Development results in items that contain both Training and Development
- Searching for Training OR Development results in items that contain either Training or Development
- Searching for Training NOT Development results in items that contain the word Training, but not Development



## Box Search: Property Criteria

- Search By:
  - The date an item was created.
  - The date an item was modified.
  - The owner of an item.
- Search results match all of the properties and text criteria.

 A screenshot of a search interface showing three filter criteria. 
 1. "Created On": Set to "Equals" with value "4/5/2016".
 2. "Modified On": Set to "Between" with values "4/10/2016" and "4/15/2016".
 3. "Owned By": Set to "Equals" with a dropdown menu open.

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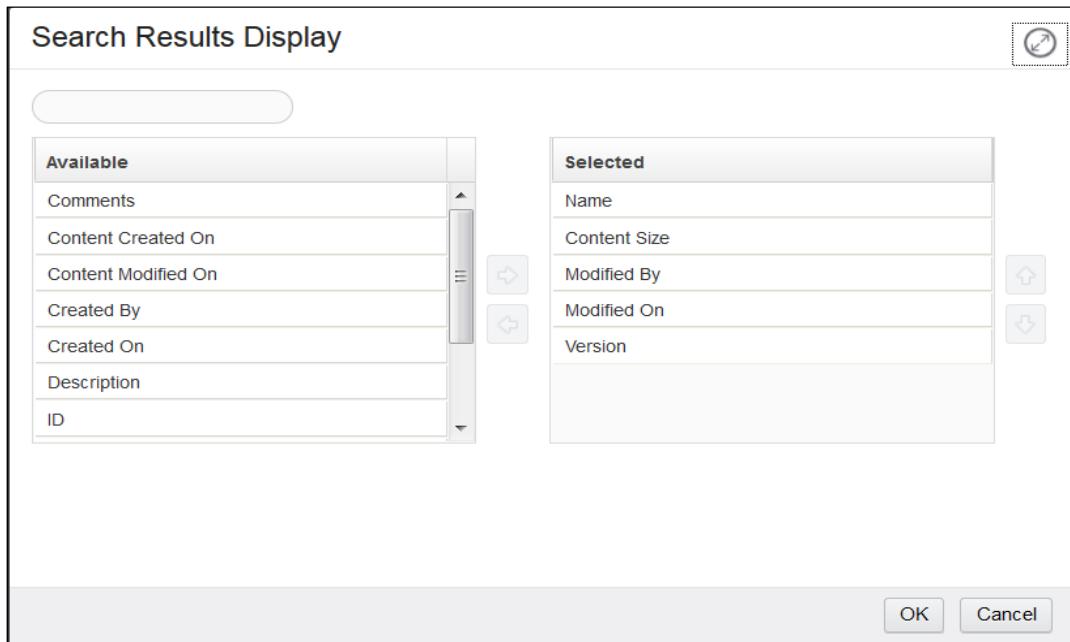
*Figure 1-49. Box Search: Property Criteria*

- Although, Box search is primarily text-based, you can do property-based search on certain properties. Search results match all of the properties and text criteria.
  - The Search by "the owner of an item" option is available only to Box administrators and co-administrators.
  - The "Created on", "Modified On", and "Owned by" criteria are always present in the Search form and cannot be reordered or removed.



## Box Search: Results Display

- Select the properties to show in the search results.



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Figure 1-50. Box Search: Results Display

The screen capture shows the "Search Results Display" pane. You can configure the properties that you want to show in the search results.

- Available properties depend on the type of items you are searching.
- Example: Content Size is available when searching for documents but not web links.



## Box Search: Web Links

The screenshot shows the "Search for" dialog for Box Search. On the left, there is a "Search for:" field and a "File type filter:" dropdown menu. The dropdown menu has options: "Documents", "Folders", and "Web Links". The "Web Links" option is highlighted with a red box and a red arrow points from it to the text "Select Web Links for the 'Search for' field." On the right, there is a larger dialog box titled "Search for: Web Links". It contains a "File type filter:" section with checkboxes for "Box Note", "Excel", "Outlook", and "PDF", all of which are disabled (grayed out). Below that is a "Content size filter:" dropdown set to "Any content size". At the bottom are "OK" and "Cancel" buttons. A red arrow points from the text "File type and Content Size filters are disabled since they are not applicable to Web Links." to the "File type filter:" section of the dialog.

Select Web Links for the "Search for" field.

File type and Content Size filters are disabled since they are not applicable to Web Links.

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Figure 1-51. Box Search: Web Links

The screen capture shows the search criteria for Web Links.

## Demonstrations

- Box Search in IBM Content Navigator.
  - Click the link in the notes area to access the demonstration.



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*Figure 1-52. Demonstrations*

If you are taking this course as a self-paced virtual course, return to the main course menu to play the pre-recorded demonstrations.

Link to the "Box Search in IBM Content Navigator" demonstration:

[http://ibm.biz/f272g\\_u01\\_l03\\_d01](http://ibm.biz/f272g_u01_l03_d01)

## Review questions



**1. True or False:**

You can search the entire Box repository, but cannot limit the search to a Box folder.

**2. True or False:**

You can filter the search based on the "Box Note" file type.

**3. True or False:**

Web Links cannot be searched.

Figure 1-53. Review questions

Write your answers here:

- 1.
- 2.
- 3.

## Review answers



### 1. True or False:

You can search the entire Box repository, but cannot limit the search to a Box folder.

The answer is False.

### 2. True or False:

You can filter the search based on the "Box Note" file type.

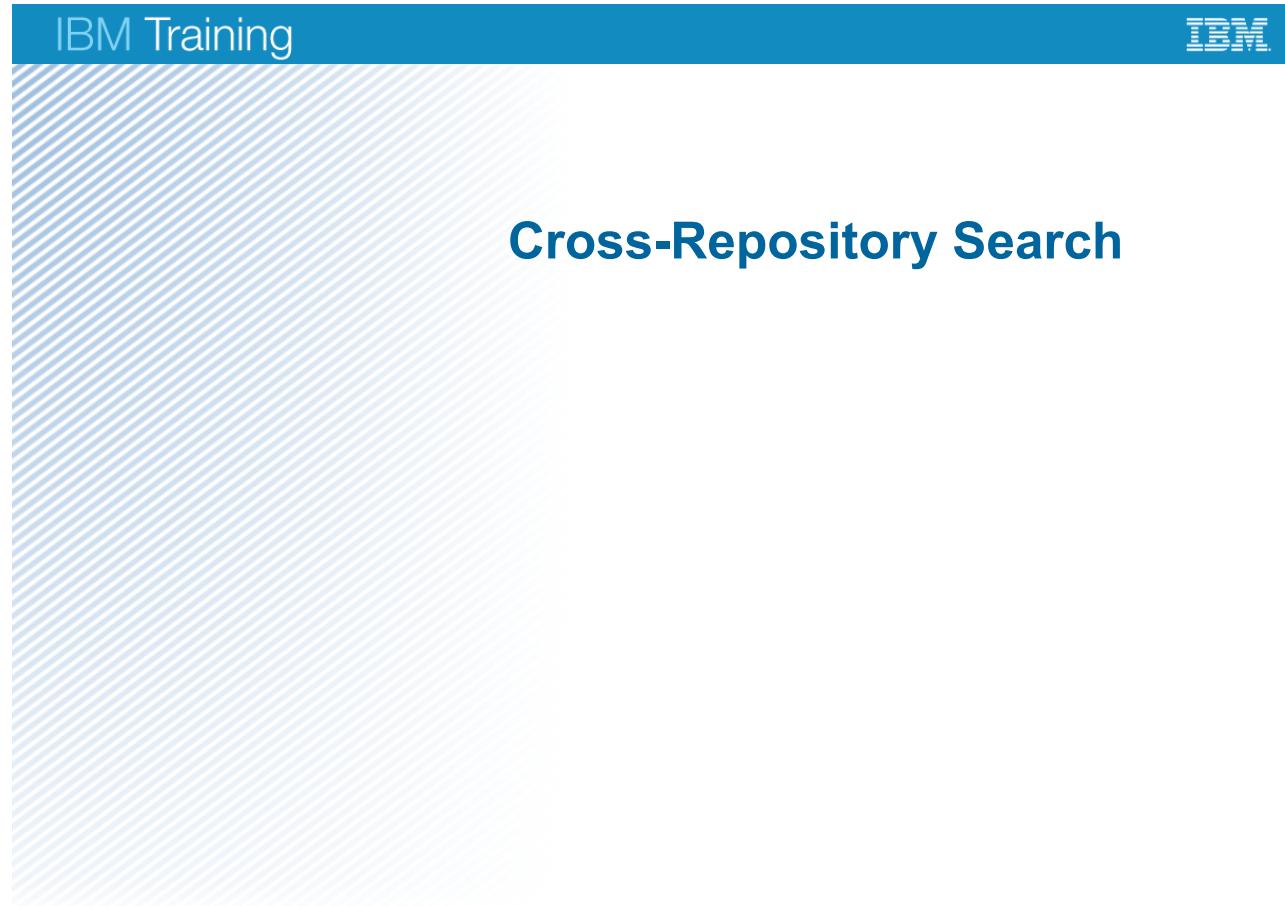
The answer is True.

### 3. True or False:

Web Links cannot be searched.

The answer is False.

## 1.4. Cross-Repository Search



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*Figure 1-55. Cross-Repository Search*

## Lessons

- View Box Content in IBM Content Navigator
  - Add Box Content in IBM Content Navigator
  - Box Search in IBM Content Navigator
-  Cross-Repository Search
- Configure Box repository in IBM Content Navigator

## Why is this Lesson important to you?

- Your customers information is stored in more than one repository (Example: Box and FileNet Content Manager). You want to search for these documents.
- To do these tasks effectively, you must be familiar with Cross-Repository Search.

Figure 1-57. Why is this Lesson important to you?

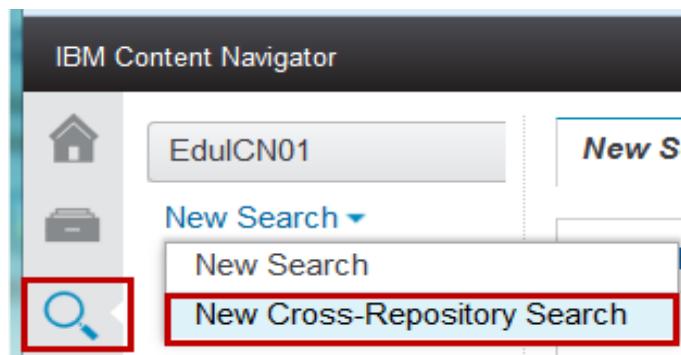
## Lesson objectives

- Create and run a Cross Repository Search.



## Box Search: Cross-Repository Search

- IBM Content Navigator enables search for content across multiple types of repositories.
  - Including Box repositories.
- Cross-Repository Search features
  - Search in up to five distinct repositories simultaneously in one interface.
  - Single sortable merged result set.
  - Support for property-based search and property mappings.



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Figure 1-59. Box Search: Cross-Repository Search

The screen capture shows the "New Cross-Repository Search" option in the Search view of the IBM Content Navigator.

**IBM Training**

**Enable Cross-Repository Search**

- Enable Cross-repository Search for repositories
  - FileNet Content Manager repository is shown in the screen capture.

The screenshot shows the IBM Content Navigator interface. The left sidebar contains icons for various management tasks like Desktops, Repositories, Sync Services, and FileNet Content Manager. The main window title is 'FileNet Content Manager repository: ICNOBJ'. Below the title, there's a toolbar with tabs for 'Search Parameters', 'System Properties', 'Browse', 'Search' (which is selected), 'Office Integration', 'IBM Connections', and 'Kalt'. A sub-section titled 'Specify which options are selected by default when users create a search.' contains a group for 'Cross-repository searches' with two radio buttons: 'Enable' (selected) and 'Disable'. At the bottom, there's a setting for 'Number of results' with options 'No limit' (selected) and 'Limit to 5,000'.

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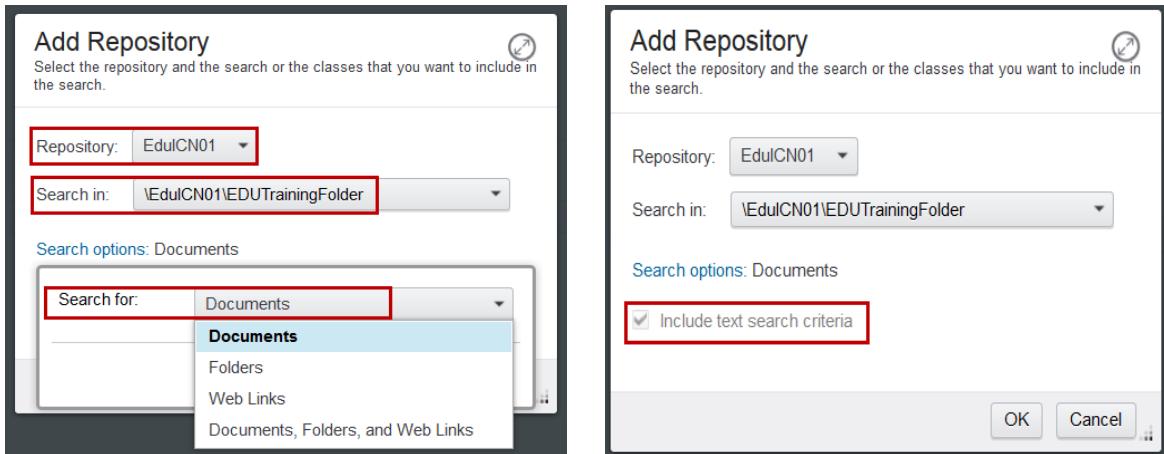
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*Figure 1-60. Enable Cross-Repository Search*

The screen capture shows the Cross-Repository Search settings for a repository (Search tab) in IBM Content Navigator administration tool.

## Cross-Repository Search settings: Scope

- The scope of the search for each repository.
- Limit the search to a specific folder.
- Select the type (Example: Documents)



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Figure 1-61. Cross-Repository Search settings: Scope

The screen captures show Search Scope settings for a repository.

Search scope:

- Do you want to limit the search to a folder level in the repository?
- What type of items that you want search (Example: Documents)?
- Include text search criteria

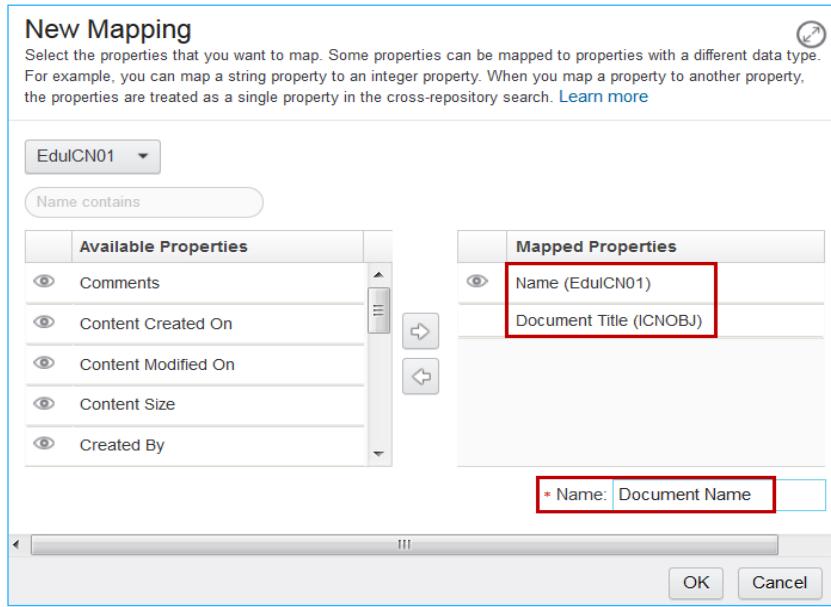
## Cross-Repository Search: Property mapping

- A pseudo property with a custom label that maps one or more properties together.
  - Define criteria common to multiple repositories with one condition.
  - Consolidate search results from various repositories into one column.
- What can be mapped?
  - Only one property from each repository.
  - It is not necessary to include all repositories.
  - Properties must have:
    - Same data type (exception: Date and timestamp.)
    - Same cardinality (single or multiple values).
    - Properties must have one or more operators in common.



## Cross-Repository Search settings: Properties

- How properties from each repository are related to each other.



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Figure 1-63. Cross-Repository Search settings: Properties

The screen capture shows mapping of properties for the following two repositories:

1. Box repository (EdulCN01)  
Property Name: Name
2. FileNet Content Manager (P8) repository (ICNOBJ)  
Property Name: Document Title

The custom label for these two properties: "Document Name".

**New Cross-Repository Search**

**Search Scope**

	Repository	Search Scope	Class	Object Type and Version	Text Search Included
box	EdulCN01	\EduICN01 \EDUTrainingFolder	Not applicable	Documents	Yes
pe	ICNOBJ	Entire Repository	Document (Including subclasses)	Documents, Released version	No

**Add Mapping    Edit    Delete**

Mapping Name	Type	Repositories
Document Name	Text string	EdulCN01, ICNOBJ
Modified On	Date	EdulCN01, ICNOBJ

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*Figure 1-64. Cross-Repository Search*

The screen capture shows a completed Cross-Repository Search.

1. Upper pane lists the repositories included in this search. (Box and FileNet P8)
2. Lower pane lists the property mappings. These properties are used for the search.

The screenshot shows the 'Cross-Repository Search: Results' page. At the top, there's a header bar with 'IBM Training' on the left and the 'IBM' logo on the right. Below the header is a title 'Cross-Repository Search: Results'. The main area is divided into two panes: 'Search Criteria' (top) and 'Search Results' (bottom).

**Search Criteria:** This pane contains a search form. It includes a search term input ('IBM') and two property filters: 'Document Name Starts With B' and 'Modified On Equals 3/28/2016'. The entire search criteria section is highlighted with a red box.

**Search Results:** This pane displays a table of search results. The columns are 'Document Name', 'Modified On', and 'Class'. There are five rows of results, each with a small document icon and a file name. The last two rows, which represent files from the Box repository, are highlighted with a red box.

	Document Name	Modified On	Class
	BICN_CRS__IBMContent.doc	3/28/2016, 4:11 PM	Document
	BICN_IBM.txt	3/28/2016, 4:11 PM	Document
	Box_CRS__IBMContent.doc	3/28/2016, 4:11 PM	
	Box_IBM.txt	3/28/2016, 4:11 PM	

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*Figure 1-65. Cross-Repository Search: Results*

The screen capture shows the Cross-Repository Search results.

- Enter a term and values for the properties to search (upper pane).
- The results show the documents from both the repositories (lower pane). The documents from the Box repository are high-lighted in the results.

## Demonstrations

- Cross-Repository Search in IBM Content Navigator.
  - Click the link in the notes area to access the demonstration.



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*Figure 1-66. Demonstrations*

If you are taking this course as a self-paced virtual course, return to the main course menu to play the pre-recorded demonstrations.

Link to the "Cross-Repository Search in IBM Content Navigator" demonstration:

[http://ibm.biz/f272g\\_u01\\_l04\\_d01](http://ibm.biz/f272g_u01_l04_d01)

## Review questions

**1. True or False:**

You can search for content across multiple types of repositories simultaneously in IBM Content Navigator.



**2. True or False:**

With Property mapping, you define criteria common to multiple repositories with one condition.

**3. True or False:**

In Property mapping, properties that are mapped can be of different data types.

Figure 1-67. Review questions

Write your answers here:

- 1.
- 2.
- 3.

## Review answers

### 1. True or False:

You can search for content across multiple types of repositories simultaneously in IBM Content Navigator.

The answer is True.



### 2. True or False:

With Property mapping, you define criteria common to multiple repositories with one condition.

The answer is True.

### 3. True or False:

In Property mapping, properties that are mapped can be of different data types.

The answer is False.

## 1.5. Configure Box repository in IBM Content Navigator

## Configure Box repository in IBM Content Navigator

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*Figure 1-69. Configure Box repository in IBM Content Navigator*

## Lessons

- View Box Content in IBM Content Navigator
  - Add Box Content in IBM Content Navigator
  - Box Search in IBM Content Navigator
  - Cross-Repository Search
-  Configure Box repository in IBM Content Navigator

## Why is this Lesson important to you?

- Your company plans to store documents in Box repository and use IBM Content Navigator to manage the content.
- To access Box in Content Navigator, you must configure the Box Repository.

Figure 1-71. Why is this Lesson important to you?

## Lesson objectives

- Configure a Box repository in IBM Content Navigator.

## IBM Content Navigator and Box integration Install

- Installed as part of an IBM Content Navigator fix pack.
  - Beginning with IBM Content Navigator 2.0.3 Fix Pack 5.
- Task manager component of IBM Content Navigator.
  - A requirement for many features of the Content Navigator and Box integration.
  - Optional component of the Content Navigator web application.
  - A Java Platform, Enterprise Edition REST application that enables you to schedule and run tasks.
- Users should be part of an enterprise Box system and have Box accounts.
  - At least one Box Developer account for setup and testing.
- Box integration requires Secure Sockets Layer (SSL) configuration for production.

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*Figure 1-73. IBM Content Navigator and Box integration Install*

To configure and deploy the task manager interface, complete the following steps:

- Complete and run the "Configure the Task Manager Component" task when you configure and deploy IBM Content Navigator.
- Enable email notifications for the task manager application. This step is required for email notifications to work.
- Associate users with the task manager roles that are created on the web application server.

## Steps to configure a Box repository in IBM Content Navigator

1. Create a Box developer account and an application on the Box website.
2. Configure Box as a repository in Content Navigator.
3. Add the Box repository to a Content Navigator desktop.
4. Enable Box Share Services.

Figure 1-74. Steps to configure a Box repository in IBM Content Navigator



## Box: OAuth2 parameters

- OAuth2 parameters are used for Authentication in IBM Content Navigator.

**OAuth2 Parameters**

client_id:	1rzxjo3xfhhwjdhc9twzcy4w2cr83r	client_id as specified in the OAuth2 spec
client_secret:	CQDACCYNvssAr2RPQG31YwMrlqaYowC	client_secret as specified in the OAuth2 spec (leave blank to reset)
redirect_uri:	<a href="https://adran112121500:9443/navigator/jax">https://adran112121500:9443/navigator/jax</a>	redirect_uri as specified in the OAuth2 spec
User Type:	<input checked="" type="radio"/> Standard Box Users <input type="radio"/> App Users	Select whether your application integrates with Standard Box Users or App Users. <a href="#">Learn more.</a>
Scopes:	<b>Content</b> <input checked="" type="checkbox"/> Read and write all files and folders stored in Box	Select the set of scopes you will request users authorize when using your app

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Figure 1-75. Box: OAuth2 parameters

### Help Path

- Integrating IBM Content Navigator with Box  
<http://www-01.ibm.com/support/docview.wss?uid=swg27046488>
- How Box uses the OAuth 2.0 standard for authentication?: <https://developers.box.com/oauth/>
- Oauth 2.0: <http://oauth.net/2/>

The screen capture shows the OAuth2 parameters for a Box account.

When you create a Box developer account and a Box application on the Box website, client\_id and client\_secret are generated.

You use these values in IBM Content Navigator for configuring the Box repository.

### What is OAuth2?

- OAuth protocol is an open standard for authorization.
- OAuth 2.0 is the next evolution of the OAuth protocol and it is not backwards compatible with OAuth 1.0.
- It provides specific authorization flows for applications.



## Configure Box repository in IBM Content Navigator

- Enable OAuth2 Authentication.

Box repository: EduICN01

**General** **Kaltura**

You must enable OAuth2 authentication before you connect to the repository.

\* Display name:

\* ID:

\* OAuth2 authentication:  Enable  Disable

\* OAuth2 client\_id:

\* OAuth2 client\_secret:

Box enterprise account subdomain:

Share administrator:

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Figure 1-76. Configure Box repository in IBM Content Navigator

The screen capture shows the configuration for a Box repository in IBM Content Navigator Administration tool.

In the new Box repository tab, do the following steps to complete the Box repository configuration.

1. Enable OAuth2 Authentication.
2. Enter the client\_id and client\_secret values that you from the Oath 2 parameters on the Box website for your Box application.
3. Optionally, you can enter a "Share Administrator".

Note: Share Administrator is a Box administrator user.



## Provide OAuth2 Authentication values

- Oauth2 client\_id and client\_secret
- SSL or localhost required

**Box Developers - OAuth2 Parameters**

client_id:	1rzxjo3xfhwjdhecg9twzcy4w2cr83r
client_secret:	CQDACCYVssAr2RPQG31YwMrlqaYOwC
redirect_uri:	https://adran112121500:9443/navigator/jaxi
User Type:	<input checked="" type="radio"/> Standard Box Users <input type="radio"/> App Users
Scopes:	Content <input checked="" type="checkbox"/> Read and write all files and folders stored in Box

**IBM Content Navigator - Repositories - EdulCN01**

You must enable OAuth2 authentication before you connect to the repository.

Display name:	EdulCN01
ID:	EdulCN01
OAuth2 authentication:	<input checked="" type="radio"/> Enable <input type="radio"/> Disable
OAuth2 client_id:	1rzxjo3xfhwjdhecg9twzcy4w2cr83r
OAuth2 client_secret:	CQDACCYVssAr2RPQG31YwMrlqaYOwC

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Figure 1-77. Provide OAuth2 Authentication values

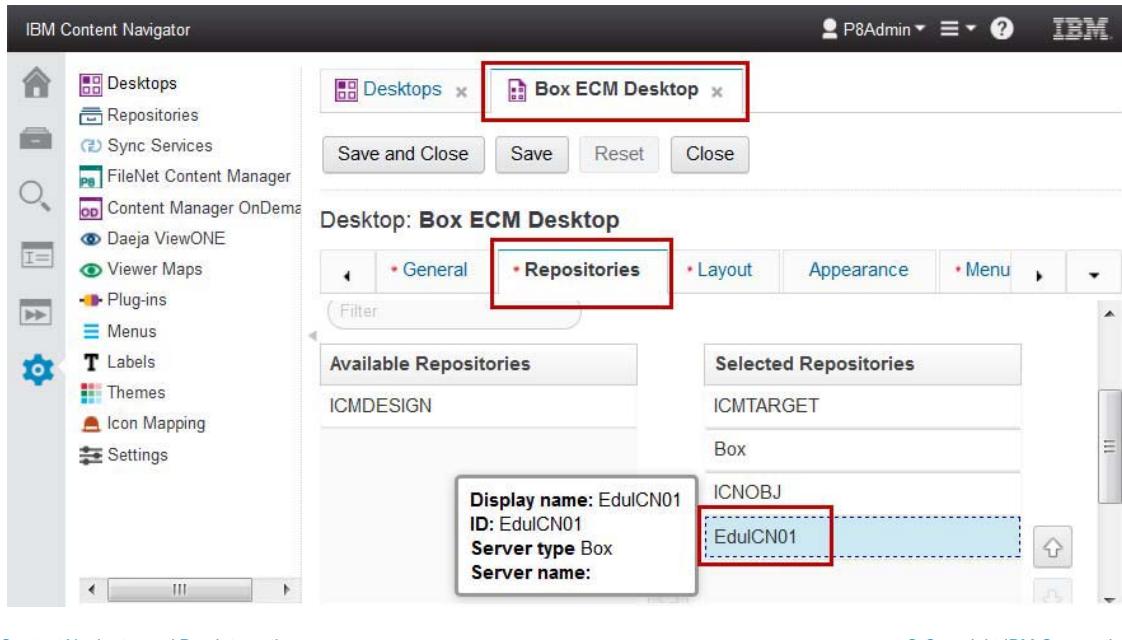
The screen capture shows the configuration for a Box repository in IBM Content Navigator Administration tool.

The client\_id and client\_secret values that are highlighted in blue on the left are from a Box account. These values are entered in Content Navigator on the right, highlighted in red.



## Add a Box repository to a Content Navigator desktop

- Open the Content Navigator desktop for editing.  
–Move your Box repository from "Available" to "Selected" pane.



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Figure 1-78. Add a Box repository to a Content Navigator desktop

The screen capture shows the Content Navigator desktop configuration for adding a repository in administration tool.

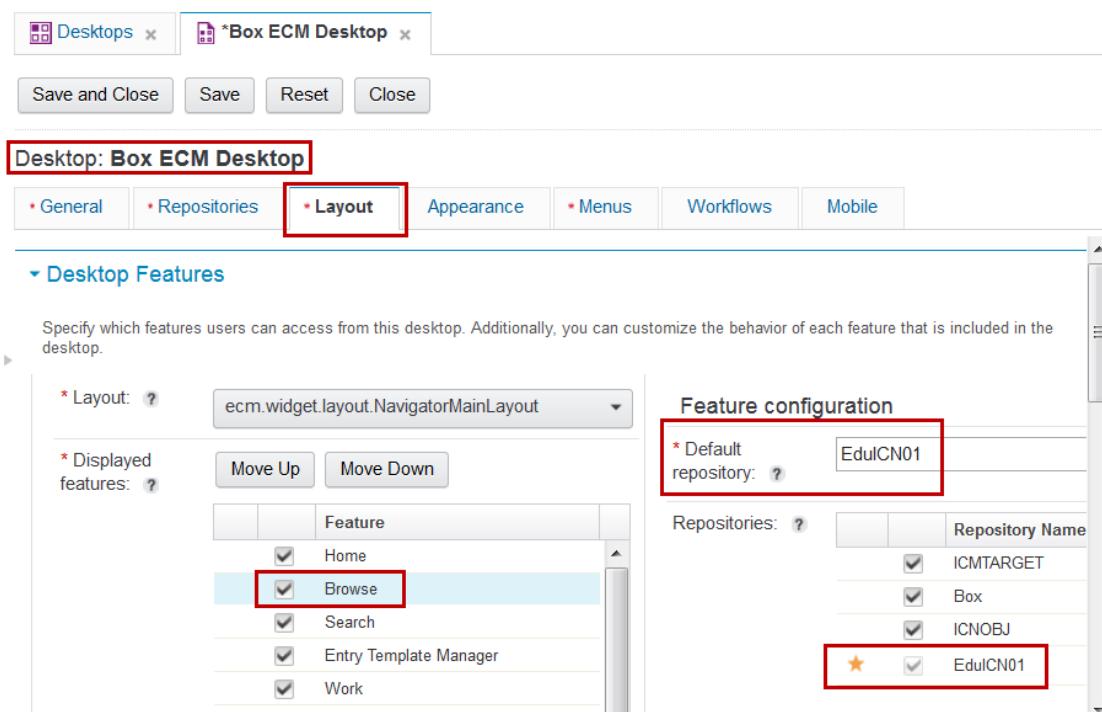
1. Select the desktop where you want to add your Box repository and open it for editing.
2. In the "Repositories" tab, move the Box repository from the "Available Repositories" pane to "Selected Repositories" pane.
3. Save the changes and close the desktop.

The IBM Content Navigator and Box integration provides users custom views of their content with "Content Navigator Desktops".

- An administrator can create a custom desktop designed for a particular user role that includes the enterprise content repositories for which they need access.
- For example, a legal clerk might need a simple desktop that provides read-only search functionality to search for content for a custodian across all repositories and then share it with outside counsel using Box. Alternatively, a paralegal might need a more functional Desktop where the paralegal can save content to a secure IBM FileNet folder, collaborate on it with specific internal and external users in Box, then include the content in a final approval process in FileNet.

# IBM Training

## Set Box repository as the default for Browse



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Figure 1-79. Set Box repository as the default for Browse

The screen capture shows the Content Navigator desktop configuration for setting a Box repository as the default for Browse in administration tool.

1. Select the desktop where you want to configure the Box repository and open it for editing.
2. In the "Layout" tab, select Browse in the "Features" list.
3. In the "Feature configuration" section, select the Box repository for the "Default repository".
4. The default repository is shown with a star symbol.
5. Save the changes and close the desktop.
6. Optionally, using the similar steps, set the Box repository as the default for Search.

## Steps to enable Box Share

1. Enable task manager in IBM Content Navigator.
2. Enable Box Share Services for a desktop.
3. Set the Share administrator in the Box repository.
4. Set task manager connection ID for the ECM repository.
5. Configure Box Share and Box Copy for the ECM repository.
6. Configure the email mapping plug-in for Box share.

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*Figure 1-80. Steps to enable Box Share*

To share from an IBM FileNet Content Manager repository, enable Box Share in the FileNet Content Manager repository settings, in the Configuration Parameters tab. When you save this configuration setting, an add-on is installed on the repository.

### Steps to enable Box Share

Each step is explained in the following charts.

#### Configure the email mapping plug-in for Box share.

- The Email mapping plug-in provides a service that returns an email address that is associated with an IBM Content Navigator user.
- The plug-in is included with IBM Content Navigator.
- If you enable a desktop and repository for Box Share, a mapping of user IDs and email addresses is required. The email address for the user is used to send the link to the document.

Refer to "IBM Content Navigator documentation: Configuring the Email mapping plug-in" for more information on email mapping for Box share.

<http://www-01.ibm.com/support/docview.wss?uid=swg27047212>

The screenshot shows the IBM Content Navigator Admin tool interface. On the left, there's a sidebar with various navigation options like Desktops, Repositories, Sync Services, etc., and a Settings icon which is highlighted with a red box. The main area is titled 'Settings' and contains tabs for General, Administrators, and Logging. The General tab is selected and shows a table of file formats with their descriptions. Below this is a section titled 'Task Manager Configuration' which is also highlighted with a red box. It contains fields for enabling the task manager service, setting its URL to 'http://adran112121500:9080/taskManagerWeb/api/v1', specifying the log directory as 'C:\Program Files\IBM\WebSphere\AppServer\profile', and enabling cluster heartbeat monitoring.

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Figure 1-81. Enable task manager in IBM Content Navigator Admin tool

The screen capture shows the task manager configuration in IBM Content Navigator administration tool.

### What is Task Manager?

Task Manager allows you to create and run automated and scheduled tasks. This component is a requirement for many tasks of the Content Navigator and Box integration. To use this feature, you must configure and deploy the task manager component as part of your IBM Content Navigator web application.

### Steps to configure Task manager:

1. Log in to the IBM Content Navigator administration tool.
2. Click Settings.
3. In the Task Manager Configuration section, complete the following tasks:
  - a. Enable the task manager service.
  - b. In the Task manager service URL field, enter the URL by which other applications can communicate with the task manager service. The URL has the format `http://server_name:port_number/taskManagerWeb/api/v1`.

Optional: You can store the logging information in a directory other than the default directory.

4. Add the task manager feature to each desktop from which you want users to access the task manager feature.



## Enable Box Share Services for a desktop

- Select a Box repository for shared files.
- Assign a Share administrator (in repository configuration)
- Allow users to send link from another email address.

Desktop: Box ECM Desktop

<b>* General</b>	* Repositories	* Layout	Appearance	* Menus	Workflows
Box share services: <input type="radio"/> Enable * Repository for shared files <input type="text" value="EdulCN01"/> Share administrator: Product Training <input checked="" type="checkbox"/> Allow users to send link from another email address <input type="radio"/> Disable					

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Figure 1-82. Enable Box Share Services for a desktop

The screen capture shows the Box share services settings for a desktop in Content Navigator administration tool.

- When you enable this service, users can share files to any repository that are Box share enabled.

To configure Box share services for a Content Navigator desktop in administration tool:

1. Select the desktop where you want to configure and open it for editing.
2. In the "General" tab, select "Enable" for the Box share services.
3. Select the Box repository for shared files.
4. Select the option to allow users to send link from another email address.
5. Save the changes and close the desktop.



## Set Share Administrator for the Box repository

- Set the administrator if
  - A desktop is enabled for Box share services.
  - This Box repository is selected for shared files.

The screenshot shows the 'Repositories' configuration page for a 'box EduICN01' repository. The 'General' tab is selected. The 'Share administrator' field contains the value 'Product Training' and is highlighted with a red border. Other fields include 'Display name' (EduICN01), 'ID' (EduICN01), 'OAuth2 authentication' (Enable selected), 'OAuth2 client\_id' (1rzxj03xfhhwdhecg9twzcy4w2cr83r), and 'OAuth2 client\_secret' (CQDACCYNvssAr2RPQG31YwMrlqaYowQj). The 'Box enterprise account subdomain' field is empty. The 'Connect...' button is visible at the bottom left, and 'Save and Close', 'Save', 'Reset', and 'Close' buttons are at the top right.

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*Figure 1-83. Set Share Administrator for the Box repository*

The screen capture shows the Box Repository settings in the IBM Content Navigator administration tool.

1. In the Box repository configuration page, click Set.
2. Log in to Box by using a valid Box administrator account. (Authorize with Box and Grant access to Box)
3. The share administrator must be a Box administrator user who is configured to have a large storage in Box.



## Task manager connection ID for Box Share for ECM repository

- Before you enable the Box share, you must set the Task manager connection ID for the ECM repository where Box Share is enabled.

FileNet Content Manager repository: **ICMTARGET**

General	<b>Configuration Parameters</b>	System Properties	Browse	Search
<input checked="" type="checkbox"/> Are checked out <input type="checkbox"/> Are declared as records <input type="checkbox"/> Have minor versions <input type="checkbox"/> Are compound documents  Display an icon when work items: <input checked="" type="checkbox"/> Are locked <input checked="" type="checkbox"/> Have a deadline  File name to use when downloading documents: <input checked="" type="radio"/> Use the file name <input type="radio"/> Use the name of the item in the repository				
Task manager connection ID:	P8Admin	Set...	Clear	
<b>Optional Features</b> Select the features that you want to enable on this repository.				

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Figure 1-84. Task manager connection ID for Box Share for ECM repository

The screen capture shows the "Task manager connection ID" setting ( required for Box share) for an ECM repository in the IBM Content Navigator administration tool.

### Task manager service

For Box share and Box copy, task manager uses an administration ID and password to run background tasks that modify the repository.

To configure the "Task manager connection ID" setting for Box share in administration tool:

- Select the repository that you want to configure.
- Open the repository for editing and connect with logon credentials.
- In the "Configuration Parameters" tab, click "Set" for the "Task manager connection ID".
- Log in with administrator credentials for the repository.
- The "Task manager connection ID" is added.
- Save the changes and close the repository.



## Configure Box Share for an ECM repository

- Configure a repository to share the documents with Box.
  - Enable Box copy
    - Allows the users to copy documents to Box.
  - Enable Box share
    - Allows users to share a document from this repository.

The screenshot shows a configuration interface for a FileNet Content Manager repository named "ICMTARGET". The "Configuration Parameters" tab is highlighted with a red box. Under the "Box copy" section, the "Enable" radio button is selected. Under the "Box share" section, the "Enable" radio button is also selected.

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Figure 1-85. Configure Box Share for an ECM repository

The screen capture shows the Box share and Box copy settings for an ECM repository in Content Navigator administration tool.

### Box Share

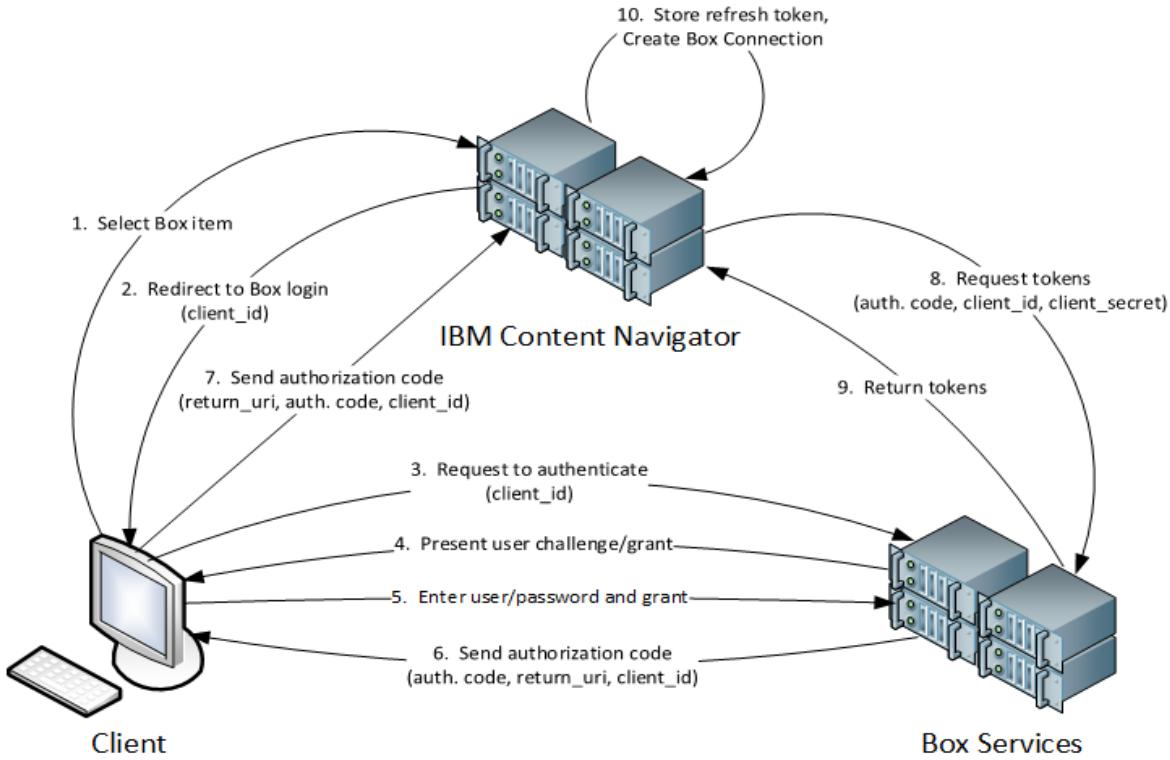
- Sharing a document includes copying the file to Box, creating a link, and sending the link in email.
- If you enable Box share, Content Navigator creates a Box share data model on the repository.
- To install the IBM Content Navigator Box share add-on, you must be connected to the repository as a library server administrator.

To configure a repository (that is included in Content Navigator desktop) for Box share in administration tool:

1. Select the repository that you want to configure.
2. Open the repository for editing and connect with logon credentials.
3. In the "Configuration Parameters" tab, select "Enable" for the "Box copy" and "Box share".
4. Save the changes and close the repository.



## Box Authentication: OAuth2 Protocol



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Figure 1-86. Box Authentication: OAuth2 Protocol

The schematic diagram shows the Box Authentication that uses the OAuth2 Protocol.

1. Log in to IBM Content Navigator, select a Box repository, and then select an item.
2. If it is the first time you are connecting to Box, Content Navigator redirects to Box logon (client\_id).
3. Request is sent to authenticate (client\_id) to Box Services.
4. Box Services presents user challenge and grant. Users see a Box logon screen.
5. User enters user name and password and grant.
6. Box Services sends authorization code (authorization code, return uri, client\_id).
7. Authorization code (authorization code, return uri, client\_id) is sent to Content Navigator.
8. Content Navigator makes a background connection to Box and requests tokens (authorization code, return uri, client\_id) from Box services.
9. Box services return the tokens.
10. Content Navigator stores tokens and creates a Box connection.

## Demonstrations

- Configure Box repository in IBM Content Navigator.
  - Click the link in the notes area to access the demonstration.



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*Figure 1-87. Demonstrations*

If you are taking this course as a self-paced virtual course, return to the main course menu to play the pre-recorded demonstrations.

Link to the "Configure Box repository in IBM Content Navigator" demonstration:  
[http://ibm.biz/f272g\\_u01\\_l05\\_d01](http://ibm.biz/f272g_u01_l05_d01)

## Review questions

1. Which of the following two values from your Box account that are required to configure the Box repository in IBM Content Navigator?

- A. client\_id
- B. client\_credentials
- C. OAuth\_credentials
- D. client\_secret

2. True or False:

You can set a Box repository as the default repository for Browse or Search feature in an IBM Content Navigator desktop.

3. True or False:

In IBM Content Navigator, you must enter the logon credentials and authenticate for Box every time you access any Box content.



Figure 1-88. Review questions

Write your answers here:

- 1.
- 2.
- 3.

## Review answers

1. Which of the following two values from your Box account that are required to configure the Box repository in IBM Content Navigator?
  - A. client\_id
  - B. client\_credentials
  - C. OAuth\_credentials
  - D. client\_secret

The answer is A and D.



2. True or False:

You can set a Box repository as the default repository for Browse or Search feature in an IBM Content Navigator desktop.

The answer is True.

3. True or False:

In IBM Content Navigator, you must enter the logon credentials and authenticate for Box every time you access any Box content.

The answer is False.

## Unit summary

- View Box Content in IBM Content Navigator.
- Add Box Content in IBM Content Navigator.
- Box Search in IBM Content Navigator.
- Cross Repository Search.
- Configure a Box repository in IBM Content Navigator.



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