NUCLEUS CYBER
An archTIS Limited Company

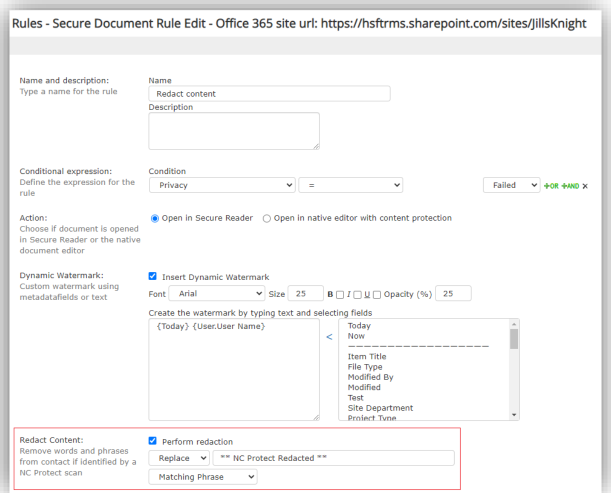
NC Protect v8 Release Notes | June 1, 2021

We are pleased to announce the latest updates to NC Protect v8 with enhanced data protection capabilities including redaction, file integrity, document sprawl controls, plus OCR and CAD file support.

New & Improved

Redaction

NC Protect can remove/redact sensitive or confidential information, such as keywords or phrases, in a document when viewed in its native application (Word, Excel, PowerPoint and PDF) or when the file is presented in the NC Protect secure reader for legal or security purposes.



Rules - Secure Document Rule Edit - Office 365 site url: https://hsftrms.sharepoint.com/sites/JillsKnight

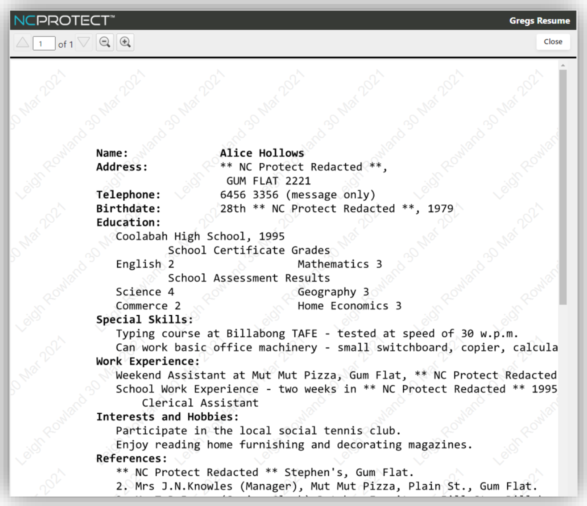
Name and description: Type a name for the rule
Name: Redact content
Description:

Conditional expression: Define the expression for the rule
Condition: Privacy = Failed

Action: Choose if document is opened in Secure Reader or the native document editor
● Open in Secure Reader ○ Open in native editor with content protection

Dynamic Watermark: Custom watermark using metadatafields or text
☑ Insert Dynamic Watermark
Font: Arial Size: 25 B □ I □ U □ Opacity (%): 25
Create the watermark by typing text and selecting fields
{Today} {User.User Name}

Redact Content: Remove words and phrases from contact if identified by a NC Protect scan
☑ Perform redaction
Replace: ** NC Protect Redacted **
Matching Phrase



```
Name:            Alice Hollows
Address:         ** NC Protect Redacted **,
                  GUM FLAT 2221
Telephone:       6456 3356 (message only)
Birthdate:       28th ** NC Protect Redacted **, 1979
Education:
   Coolabah High School, 1995
           School Certificate Grades
   English 2                  Mathematics 3
           School Assessment Results
   Science 4                  Geography 3
   Commerce 2                 Home Economics 3
Special Skills:
   Typing course at Billabong TAFE - tested at speed of 30 w.p.m.
   Can work basic office machinery - small switchboard, copier, calcula
Work Experience:
   Weekend Assistant at Mut Mut Pizza, Gum Flat, ** NC Protect Redacted
   School Work Experience - two weeks in ** NC Protect Redacted ** 1995
       Clerical Assistant
Interests and Hobbies:
   Participate in the local social tennis club.
   Enjoy reading home furnishing and decorating magazines.
References:
   ** NC Protect Redacted ** Stephen's, Gum Flat.
   2. Mrs J.N.Knowles (Manager), Mut Mut Pizza, Plain St., Gum Flat.
```

File Integrity

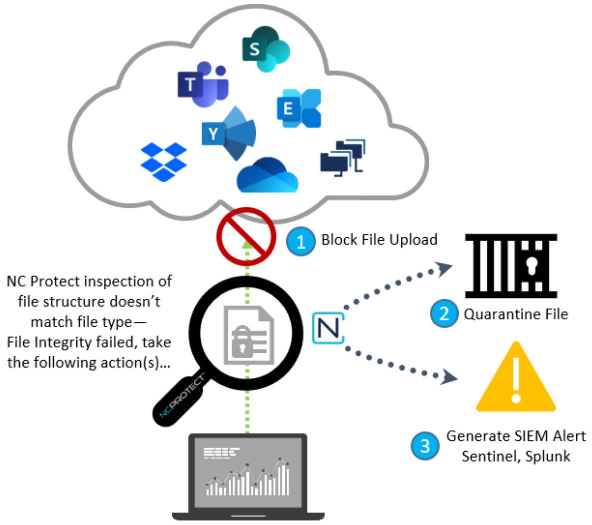
File Integrity is a check to ensure the format, extension, type, and structure of a file match upon upload into a repository. If they do not match, the File Integrity check will be marked as failed.

This is an important check as every file type has a specific structure. An application, such as Word or Excel, read this structure to visualize the content of the file to the user. By changing the structure in a malicious way or by encryption, the content might be lost or inaccessible. File integrity will prevent users from overwriting valid files with corrupted files and protect your assets from being maliciously encrypted.

For example, suppose you have a file repository with NC Protect Dynamic Access Rule (DAR) that says “if ‘File Integrity’ == Failed then Deny”. If you compress (ZIP) the file “MyFile.docx”, set a password on the ZIP and then rename “MyFile.zip” back to “MyFile.docx”, you have created an encrypted version of “MyFile.docx” only accessible to the current user. However, if this is uploaded into the NC protected repository, the upload will be blocked because File Integrity will recognize that the bytes of the file is not actually a Word file. This feature will prevent a malicious person or software from overwriting valid office documents with corrupted or encrypted versions of the files.

Actions NC Protect can take if File Integrity fails:

- **Block/Deny file upload**
- **Quarantine file for manual review**
- **Generate a SIEM Alert** - The remediative actions taken can be recorded in the NC Protect user activity log (UAL) and be posted to a SIEM such as Sentinel or Splunk to send an alert that a file has failed the integrity check and set off a workflow for further investigation.


1 Block File Upload
NC Protect inspection of file structure doesn't match file type— File Integrity failed, take the following action(s)...
NCPROTECT
N
2 Quarantine File
3 Generate SIEM Alert Sentinel, Splunk

Use Cases

1. **Malicious restriction of access by an employee** — A disgruntled employee is leaving the company and accessed key sales spreadsheets and copied them onto their machine. He then zipped them with a password and copied the files back to file share as an encrypted document that only he can use and access. NC Protect can detect the changes and stop the encrypted file from being uploaded onto your systems, effectively thwarting the insider attack.
2. **Malicious restriction of access by a bad actor** — Ransomware attackers often get access to your systems, copy and encrypt all your files and then store the encrypted files back on your system. You now cannot open your encrypted files unless you pay a ransom to get the decryption key. Since encryption completely changes the structure of a file, NC Protect can detect the changes and stop the file from being uploaded onto your systems and save the repository from being hijacked with encryption. The SIEM integration can fire off an alert so that security teams can investigate and quickly take corrective actions.

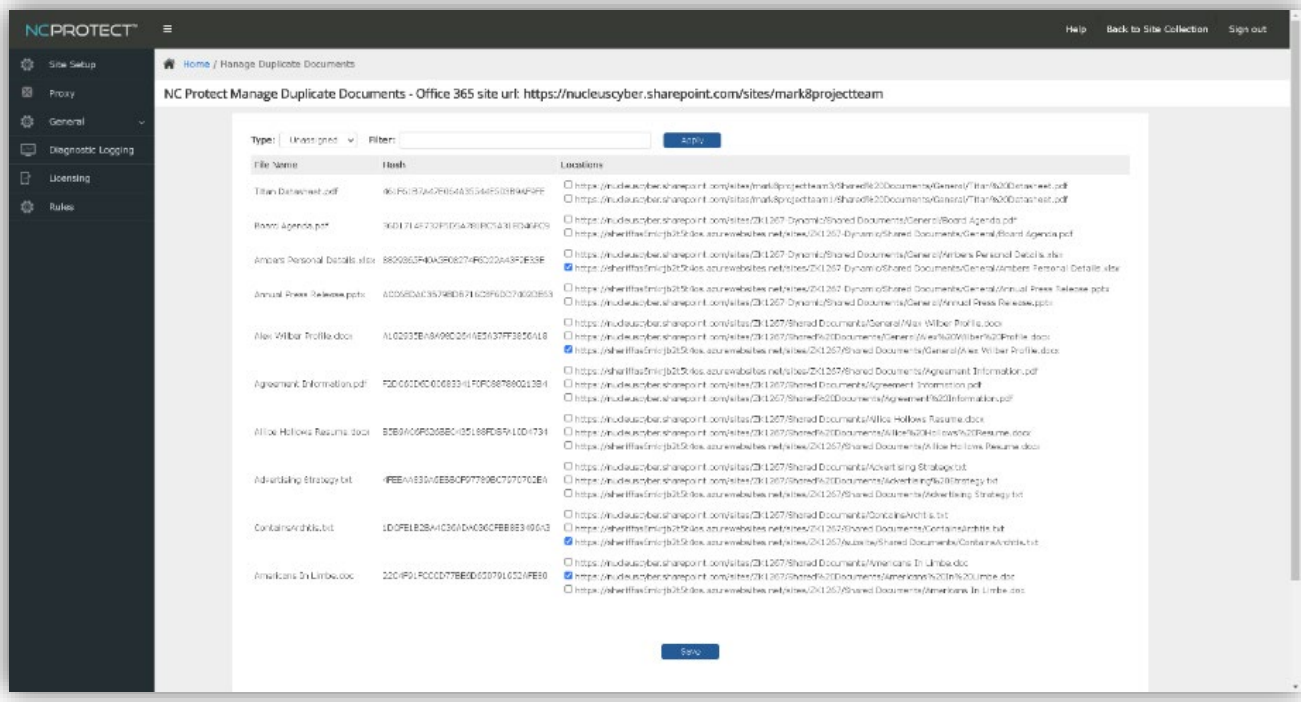
3. **File corruption** — If you download a file from repository, and your internet connection fails, the file download will not be complete, and be corrupted as the file will have an incomplete structure. You will still see the file as .docx document, despite it being invalid. If you try to upload the corrupted file back into the repository, NC Protect can detect the corruption and prevent the original file from becoming overridden and corrupted as well.
4. **Virus Masking** — If a virus is masked as well-known file type, NC Protect will validate if the file structure matches the file type extension. It can reject the file from being uploaded to the repository if the file type does not match, thus preventing someone from the opening the file in the repository and unknowingly launching the virus.

It is important to note that File Integrity **is not virus protection**.

Duplicate Document Management

The Duplicate document management feature identifies documents with exactly the same name and content within your SharePoint environment. It can provide an overview of the where those duplicate files are, and you can nominate a 'master copy' of a document, which then will be presented to users.

For example, if a user downloads a file from one SharePoint location, and uploads it to another SharePoint location, or in a chat, this will result in identical files in separate locations. NC Protect will identify that there are multiple copies of the same document the administrator can promote one copy as the master file. Users edit one master copy of the document, and the changes will be reflected in all other file locations.



NC Protect Manage Duplicate Documents - Office 365 site url: https://nucleuscyber.sharepoint.com/sites/mark8projectteam

Type: Unassigned Filter:

File Name	Hash	Locations
Titan Datasheet.pdf	461F61B7A42E054A35544E503B94F9FF	□ https://nucleuscyber.sharepoint.com/sites/mark8projectteam3/Shared%20Documents/General/Titan%20Datasheet.pdf □ https://nucleuscyber.sharepoint.com/sites/mark8projectteam1/Shared%20Documents/General/Titan%20Datasheet.pdf
Board Agenda.pdf	36D1714F732F5D5A78BPC5A31ED46FC9	□ https://nucleuscyber.sharepoint.com/sites/ZK1267-Dynamic/Shared Documents/General/Board Agenda.pdf □ https://sheriffas5micjb2t5t4os.azurewebsites.net/sites/ZK1267-Dynamic/Shared Documents/General/Board Agenda.pdf
Ambers Personal Details.xlsx	8829863F40A3B08274F6D22A43F2E33E	□ https://nucleuscyber.sharepoint.com/sites/ZK1267-Dynamic/Shared Documents/General/Ambers Personal Details.xlsx ☑ https://sheriffas5micjb2t5t4os.azurewebsites.net/sites/ZK1267-Dynamic/Shared Documents/General/Ambers Personal Details.xlsx
Annual Press Release.pptx	ADD58DAC35798DB716C8F6DC7d020B53	□ https://sheriffas5micjb2t5t4os.azurewebsites.net/sites/ZK1267-Dynamic/Shared Documents/General/Annual Press Release.pptx □ https://nucleuscyber.sharepoint.com/sites/ZK1267-Dynamic/Shared Documents/General/Annual Press Release.pptx
Alex Wilber Profile.docx	A1C02935BA8A98D264AE5A37FF3856A18	□ https://nucleuscyber.sharepoint.com/sites/ZK1267/Shared Documents/General/Alex Wilber Profile.docx □ https://nucleuscyber.sharepoint.com/sites/ZK1267/Shared%20Documents/General/Alex%20Wilber%20Profile.docx ☑ https://sheriffas5micjb2t5t4os.azurewebsites.net/sites/ZK1267/Shared Documents/General/Alex Wilber Profile.docx
Agreement Information.pdf	F2D060D6D00683341F0F0887880213B4	□ https://sheriffas5micjb2t5t4os.azurewebsites.net/sites/ZK1267/Shared Documents/Agreement Information.pdf □ https://nucleuscyber.sharepoint.com/sites/ZK1267/Shared Documents/Agreement Information.pdf □ https://nucleuscyber.sharepoint.com/sites/ZK1267/Shared%20Documents/Agreement%20Information.pdf
Alice Hollows Resume.docx	B5B9A06F626BBC435188FDBFA10D4734	□ https://nucleuscyber.sharepoint.com/sites/ZK1267/Shared Documents/Alice Hollows Resume.docx □ https://nucleuscyber.sharepoint.com/sites/ZK1267/Shared%20Documents/Alice%20Hollows%20Resume.docx □ https://sheriffas5micjb2t5t4os.azurewebsites.net/sites/ZK1267/Shared Documents/Alice Hollows Resume.docx
Advertising Strategy.txt	4FEEAA830A6E880P97780BC7070702EA	□ https://nucleuscyber.sharepoint.com/sites/ZK1267/Shared Documents/Advertising Strategy.txt □ https://nucleuscyber.sharepoint.com/sites/ZK1267/Shared%20Documents/Advertising%20Strategy.txt □ https://sheriffas5micjb2t5t4os.azurewebsites.net/sites/ZK1267/Shared Documents/Advertising Strategy.txt
ContainsArchits.txt	1D0FE1B2BA4C36ADA036CFBB8E3490A3	□ https://nucleuscyber.sharepoint.com/sites/ZK1267/Shared Documents/ContainsArchits.txt □ https://sheriffas5micjb2t5t4os.azurewebsites.net/sites/ZK1267/Shared Documents/ContainsArchits.txt ☑ https://sheriffas5micjb2t5t4os.azurewebsites.net/sites/ZK1267/subsite/Shared Documents/ContainsArchits.txt
Americans In Limbe.doc	2204F91FC0CD77BE6D650791052AFE80	□ https://nucleuscyber.sharepoint.com/sites/ZK1267/Shared Documents/Americans In Limbe.doc ☑ https://nucleuscyber.sharepoint.com/sites/ZK1267/Shared%20Documents/Americans%20In%20Limbe.doc □ https://sheriffas5micjb2t5t4os.azurewebsites.net/sites/ZK1267/Shared Documents/Americans In Limbe.doc

This is also useful if you are using information barriers and one of the documents falls within the policy, for example because of its location or data attributes, then all other copies will be protected as well.

The duplicate documents feature helps organizations minimize the overhead of handling large numbers of identical documents that reside in different locations, and at the same time empowers users to always consume the latest and most relative content.

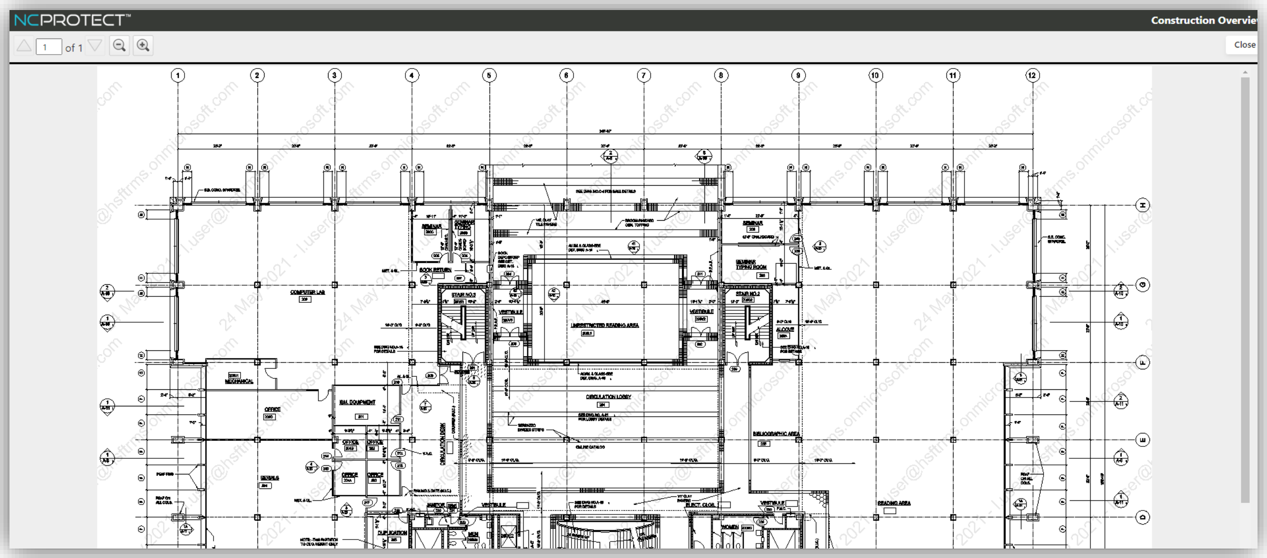
Additionally, redirecting other copies of the file back to the "master" in a secure location reduces the attack surface and prevents sensitive information disseminating in \to less secure locations.

OCR Support

NC Protect can now scan OCR content of image files and images in documents against defined access and protection policies.

CAD File Support

NC Protect now supports scanning of CAD files (.dgn, .dwf, .dwfx, .dwg, .dwt, .dxf, .ifc, .iges, .plt, .stl, .cff2) against defined access and protection policies. CAD files can now also be viewed in the NC Protect Secure Reader to provide read-only access to the files.


NCPROTECT™
Construction Overvie
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