# Appendix

## Inspector Digi

### Question/s?

What date was this image taken?

Can you find out the device on which the image was taken?

What famous location is in the image?

Can you find out what iconic painting is this place famous for?

What other interesting metadata can you find?

### Guide/s:

Welcome to the beginner's guide to Open Source Intelligence (OSINT) activities! OSINT is the process of gathering information from publicly available sources to gain insights and intelligence for various purposes, such as research, investigation, or decision-making. In this guide, we will cover the basics of OSINT activities with a focus on the legal and ethical considerations specific to the UK and provide you with a step-by-step approach to get started.

### The Plan:

#### Step 1: Define Your Objective

The first step in any OSINT activity is to clearly define your objective. What information are you looking for? What is the purpose of your investigation or research? Clearly define your goals and objectives to guide your OSINT activities, while keeping in mind the legal and ethical framework in the UK.

#### Step 2: Choose Your Sources

<p class="description">In the UK, there are several sources of publicly available information that can be used for OSINT activities, including:</p>

<p class="description">Search engines: Popular search engines like Google and Bing can be used to search for information on websites, forums, social media, news articles, and more. </p>

<p class="description">Social media: Social media platforms such as Facebook, Twitter, LinkedIn, Instagram, and others can provide valuable information about individuals, organizations, events, and activities. However, it's important to adhere to the privacy settings and terms of service of these platforms. </p>

<p class="description">Public records: Publicly available records such as property records, court records, business registrations, and government databases can provide valuable information. </p>

<p class="description">News and media: News websites, online publications, and media archives can provide information about recent events, stories, and trends. </p>

<p class="description">Forums and discussion boards: Online forums and discussion boards related to your topic of interest can provide insights, opinions, and information from individuals with relevant knowledge. </p>

<p class="description">Websites and blogs: Websites, blogs, and online forums related to your topic can provide valuable information and insights. </p>

<p class="description">Publicly available documents: Reports, whitepapers, research papers, and other publicly available documents can provide in-depth information and insights. </p>

#### Step 3: Use Search Techniques

When using search engines, it's important to use effective search techniques to get relevant results. Here are some tips:

<p class="description"><b>Use advanced search operators:</b> Search operators like site:, filetype:, inurl:, and intext: can help you refine your search and find specific types of information.</p>

<p class="description"><b>Use quotation marks:</b> Placing search terms in quotation marks ("") will search for an exact phrase, which can be helpful when looking for specific information. </p>

<p class="description"><b>Try different search engines:</b> Different search engines may have different results, so it's worth trying multiple search engines to get a comprehensive search result. </p>

#### Step 4: Verify Information

Once you find information, it's crucial to verify its accuracy and reliability. Always cross-check information from multiple sources to ensure its validity. Be cautious of misinformation, fake news, and biased sources.

#### Step 5: Organise and Analyse Information

As you gather information, it's important to organise and analyse it effectively. Use tools like spreadsheets, note-taking apps, or specialised OSINT tools to keep track of your findings. Analyse the information to identify patterns, trends, and relationships that can provide insights.

#### Step 6: Respect Privacy and Legal Guidelines

During your OSINT activities, it's essential to respect privacy and legal guidelines. Avoid accessing restricted information, hacking, or engaging in illegal activities. Always follow ethical guidelines and laws related to OSINT in the UK.

#### Step 7: Stay Safe and Secure

Finally, remember to prioritise your safety and security during OSINT activities. Be cautious of sharing personal information online, and use tools like VPNs, proxy servers, or anonymisation techniques to protect your identity and privacy.

### Step by Step Guide:

#### Step 1: Choose an Online Metadata Extraction Tool

There are several online tools available that can extract metadata from images. Some popular options include: (see html file)

Choose a tool that suits your needs and has good user reviews.

#### Step 2: Upload Your Image

Once you have selected a metadata extraction tool, navigate to the website and look for the option to upload an image. This may be labelled as "Choose File" or "Upload Image" depending on the tool you are using. Click on the button and select the image you want to extract metadata from from your local device.

#### Step 3: Extract Metadata

After uploading the image, the online tool will process the image and extract the metadata embedded within it. This may include information such as camera make and model, exposure settings, date and time the photo was taken, GPS coordinates, and more. The extracted metadata will be displayed on the screen, allowing you to view and analyse the information.

#### Step 4: Analyse and Interpret the Metadata

Once the metadata is extracted, it's important to analyse and interpret the information. This can provide valuable insights about the image, such as the camera used to capture it, the location where it was taken, and other details that may be relevant to your investigation or research.

#### Step 5: Save or Export Metadata

Depending on the online tool you are using, you may have the option to save or export the extracted metadata. This can be useful for documentation purposes or further analysis. Follow the instructions provided by the tool to save or export the metadata in a suitable format, such as CSV or XML.

#### Step 6: Consider Privacy and Legal Considerations

It's important to be mindful of privacy and legal considerations when extracting metadata from images. Some images may contain sensitive information, such as geolocation data, that may violate privacy rights or local laws. Always ensure that you have proper authorisation and legal rights to access and use the metadata extracted from images.

#### Step 7: Stay Safe and Secure

Lastly, always prioritize your safety and security when using online resources. Use reputable and trustworthy online tools and be cautious of sharing personal information or uploading images that may contain sensitive data.

Remember, metadata extraction from images should always be conducted in an ethical and legal manner, respecting privacy rights, and adhering to applicable laws and regulations.

#### Social Links to Pictures to look for metadata:

Instagram: <https://www.instagram.com/cyberx_learn/>

Twitter: <https://twitter.com/CyberxLearn>