

accounts are terminated, according to the Microsoft Services Agreement, with no possibility of reinstatement.¹⁵

PhotoDNA

45. In 2009, Microsoft, working with Dartmouth College, developed PhotoDNA, a technology that aids in finding and removing known images of child sexual abuse from the internet. PhotoDNA creates a unique digital signature (known as a “hash”) of an image which is then compared against signatures (hashes) of other known illegal photos to find copies of the same image. When matched with a database containing hashes of previously identified illegal images, PhotoDNA is an incredible tool to help detect, disrupt and report the distribution of child sexual exploitation and abuse imagery. PhotoDNA is not facial recognition software and cannot be used to identify a person or object in an image. A PhotoDNA hash is not reversible, and therefore cannot be used to recreate an image. It is one of Microsoft’s key tools in the company’s own fight against CSEAI.
46. There are two predominant hash databases – one maintained by NCMEC and the other by the IWF. New images found by these organisations, either through their own research or via industry reporting, are added to each database. (e.g. PhotoDNA).
47. In 2015, Microsoft made PhotoDNA available as a service on Azure.¹⁶ The PhotoDNA Cloud Service enables smaller companies and other organizations that want to give users the freedom to upload content while ensuring the integrity of their platforms without having to dedicate engineering resources in-house.
48. To date, Microsoft has provided PhotoDNA technology to more than 155 organizations, primarily technology companies, application developers and non-profits, including 75 organizations that have been approved for the PhotoDNA Cloud Service.¹⁷ The majority of these are small organisations.
49. Microsoft has also made PhotoDNA available to law enforcement worldwide at no charge since 2012. PhotoDNA has been widely adopted into innovative visual image and forensic tools used by law enforcement across the globe.
50. In 2016, Microsoft provided the Internet Watch Foundation (IWF) sublicensing rights to PhotoDNA to enable IWF members to access to the IWF Image Hash List, deployed through the PhotoDNA cloud solution.¹⁸ The obstacles of in-house engineering have been removed, meaning that proactive monitoring of a company’s platform is no longer

¹⁵ Microsoft Services Agreement: <https://www.microsoft.com/en-gb/servicesagreement/>

¹⁶ Microsoft (2015) Microsoft’s PhotoDNA: Protecting children and businesses in the cloud <https://news.microsoft.com/features/microsofts-photodna-protecting-children-and-businesses-in-the-cloud/>

¹⁷ See e.g. <https://www.iwf.org.uk/news/netsweeper-and-iwf-up-ante-against-child-sexual-abuse-imagery-microsoft-photo-dna-technology>

¹⁸ IWF (2016) Tech breakthrough announced on the 20th anniversary of IWF’s first child sexual abuse imagery report <https://www.iwf.org.uk/news/tech-breakthrough-announced-on-20th-anniversary-of-iwfs-first-child-sexual-abuse-imagery>