

▶ **FEATURE**

by **RAFAEL HOFFMAN**



# **SAFETY** **NET**

*FIGHTING CYBER WITH CYBER*



# THE ADVENT OF **INTERNET**

has changed countless facets of business, communication, and daily life. While the world at large embraced these changes with few reservations, millions eventually realized the need to design ways of limiting access to much of its content. As a result, much money and many resources have been invested in developing effective means of taming this useful but wild beast, with mixed results.

For over two decades, *Klal Yisrael* has confronted this multifaceted conundrum with far higher stakes, but also with a higher bar for success in mind and greater determination to find effective solutions.

This struggle has already seen several chapters, with no conclusion in sight. In one of the earlier of them, while the internet's pitfalls became readily clear, it remained possible for many if not most who wanted to remain free of it to do so. As that period began to set, more Rabbanim backed the concept of filter systems as a safeguard against the worst of what the World Wide Web has to offer.

The mass gathering at Citi Field stadium in 2012 initiated a sea change where the majority of Orthodox Jews that needed or chose internet access did so by way of one of several emerging filtration options. At the same time, a sector of organizations such as TAG and then L'Taher and Machane Kadosh emerged to advise and help individuals and institutions navigate their protected internet use. Others like Meshimer and Geder offered advanced filtering plans tailored for the community's needs.

Initially, nearly all filtration was done through technology like K9, which was designed for the general population to control the access that children or employees during work hours had to internet content. Yet, over time, a demand for systems that catered to the needs of the Orthodox community led to the development of filters designed specifically for its use.

Great advances were made and a line of Jewish-designed filters that

were able to scan websites for content and detect and block skin tone were developed. The ability of such sites to use teams of employees and artificial intelligence to manage sites in a far more sophisticated way marked a major advancement.

Still, since such filters relied heavily on categorizing sites and left users with the options of pages either open or closed and images either universally blocked or open, many ended up with access to content that was unneeded, and sometimes inappropriate, together with access to sites they needed for professional or personal reasons.

A product that was developed, known as Net-Free, is attempting to bridge this gap.

A few years ago, a group of graphic designers in Eretz Yisrael were frustrated with the whitelisting-based filtering options available to them. Moreover, despite their desire to work with a maximum of spiritual protection, the choice of having images on a page either blocked or open was not a practical option for achieving that goal, given their profession.

A small group of computer programmers also in Eretz Yisrael keenly understood the predicament that they were hearing more often and decided that if a better way were to be found, they would have to be the ones to create it.

“We decided there is no choice, we had to try and create a filter ourselves,” said Rabbi Baruch Soloveitchik, one of NetFree’s founders.

A few of these programmers decided to volunteer their time to create and maintain the system that would become NetFree.

“Graphic designers obviously need a lot of access to image sites, so they had to keep asking for different pages to be open that were a mix of pictures they needed and a lot of things that they would have preferred not to see. For them, a choice of blocking all skin tone was not practical. For all intents and purposes, once they removed the image filters, they had a lot of the same problems that you would have with unfiltered internet in the first place,” said Dovid Stroh, a NetFree representative in America.

The root of the problem as the group saw it was that, while whitelisting effectively blocks all that is left unopened, the exceptions each user needs are dealt with in an all-or-nothing manner. Category-based filtering was effective in blocking out websites that can be classified as belonging to a problematic group, but the abundance of mixed categories, such as news, shopping, and travel, inherently leave many pitfalls uncovered. The result is a system where many users require a great deal of exceptions to be made to suit their individual needs.



“ ***This was an idea that was going around for years – that we essentially have to make our own internet.***”





NetFree's designers sought to address both problems. Firstly, they eliminated the category system and worked purely based on whether each site requested by users is deemed kosher or not. Should too much material be deemed unfit, the request is rejected and the entire site will remain closed. But if the site is acceptable as is or can be "*kashered*," NetFree's team will make them available or sanitize them in real-time.

The *kashering* process involves a review of both text and images, both of which will be blocked from view if deemed inappropriate. In many cases part of a site will remain open while other sections remain closed. However, those that are sanitized are then open for all NetFree users — essentially creating a sized-down self-contained World Wide Web.

"This was an idea that was going around for years — that we essentially have to make our own internet, where everything that is available on it has been prereviewed — basically, that's what NetFree does," said Mr. Stroh. "There are no exceptions; everything is on one universal level. If it's kosher it's open to everybody; if it's not, there's no way for anybody to get it. By the same token, since we are not making compromises, we need to find a lot more solutions."

Rabbi Avraham Y. Heschel, an editor at *Hamodia* and longtime *Inyan chizuk* columnist, who was given a close-up look at NetFree when he met with Rabbi Soloveitchik in Bnei Brak last year, said he was "amazed" by what he saw.

"This has the potential to really revamp the entire way we perceive internet filters. While internet use by definition will never

be fully safe from a spiritual perspective, and should always be used only on an as-needed basis, this will certainly make it less dangerous," he said.

Should users not need or want all the sites opened available to them, they can opt in their settings to "reduce risk," and close off certain categories. There are also the reduced risk plans offered at a discounted price as an incentive.

The system was initially run by a small team of volunteers, but that proved impractical quickly. Now a team of female employees reviews sites to deem them kosher or not and a groups of technicians mostly in India review and block or open images as per NetFree's standards.

The company continues to operate under the guidance of a Bnei Brak-based *vaad* established for technology issues which, in turn, is under the authority of the *beis din* founded and formally led by Harav Nissin Karelitz, *zt"l*.

Rabbi Yinon Abraham, who runs a U.K.-based organization to guide the Orthodox community on Internet use and filtering options known as Oz Nidbaru, said that he has advised a wide array of clients to use NetFree over the past two years.

"Even the best filter systems have holes in them that can be very problematic," he said. "NetFree essentially creates a safe web and keeps users within it; it's a whole different standard that didn't exist before."



“

***It's a way to do what you need on the internet and really never have to have a problem with shemiras ha'einayim.”***

While Rabbi Abraham said that some professions that necessitate wide-ranging research could presently be difficult to pursue on the network, he has seen accountants, fundraisers, teachers, travel agents, programmers, interior designers, insurance agents, musicians, photographers, and people enrolled in online courses who were all pleased with NetFree.

“For graphic designers NetFree is better than anything else out there, because any site that gets opened has all the kosher pictures available. I personally know people who sell on eBay and it works for them,” he said. “It might not work for every business, but it’s worth installing it on one computer in your office and giving it a try.”

As proof of its advantages, Rabbi Abraham pointed to NetFree’s growth, saying that in a few years the network has grown from 20-30 thousand users to over 70,000.

Rabbi Abraham added that while using NetFree’s system might take an adjustment period for those used to other systems, the difference may be felt far less by those first entering the workforce.

“For people who have been using the internet until now, whether they want to use NetFree will have a lot to do with how dedicated they are to the idea of kosher internet, but, there is no reason this cannot become the standard for many young men and women who are first starting to use internet.”

A few years ago, upon the request of Harav Moshe Hillel Hirsh, *shlita*, *Rosh Yeshivah*, Yeshivas Slabodka in Bnei Brak, the network added English-speaking staff and 24-hour service





**“It’s well worth the level of *kashrus* you’re getting in return.”**

to make itself available to users around the world.

Yisroel Levy joined NetFree two years ago. Using internet mostly for personal banking and the transfer of Google Docs, he said that the filter works very well for his needs, both practical and spiritual.

“The advantage it has is that what’s *mutar* is *mutar* and what’s *assur* is *assur*,” said Mr. Levy. “It’s a filter made for a Torah Yid who understands that there are some things that you can have and some things that you can’t. It’s a way to do what you need on the internet and really never have to have a problem with *shemiras ha’einayim*.”

The more users join the system and send in requests for the sites they need, the larger the pre-screened web becomes. As of a couple of weeks ago, over 970 million sites had been reviewed — an average of 30 million per month. In a span of 15 minutes, over 200,000 images can be reviewed. Subscribers are limited in the number of sites they can send for review and rate their requests in priority according to a point system, with each user assigned 16 per month for each connection to the filter, but additional ones can be purchased.

Rabbi Moshe Drew, Director of TAG, said that NetFree represents a new evolutionary step in efforts to create safer options for internet use.

“Filters basically all worked with lists and were status quo for many years. Unknowingly, *Klal Yisrael* has been fighting for about five years to get something better, a system with more features that’s more customized for its needs. That’s when Jewish filters that used artificial intelligence started to come along that could zero in on users’ needs and do things like open up a specific video, but keep the rest of YouTube closed, and things like that. The whole idea of filtering in real time was a Jewish concept that has become more and more standard,” he said. “NetFree took *kashrus* to the next level. Artificial Intelligence catches a lot, but NetFree uses humans who can catch 100 percent of the problems.”

Rabbi Drew said that his and other organizations in the technology *kashrus* line have strongly encouraged NetFree use, but he readily admitted that, as it is now at least, it is not an easy fit for the needs of every business or internet access need.

“For now, it’s mostly made for the home user who is willing to deal with the lag time it takes to deliver the level of *kashrus* it provides, but the fact is, there is no other filter out there that can get as close to being 100 percent save from a *ruchniyus* perspective as NetFree,” he said. “The hope is that more users will continue to join, and as the network expands NetFree will become practical for more and more people.”

The hope, however, is that as more users join and more sites are reviewed and opened, the “kosher” web the organization creates will gradually expand and become a practical option for more people, building on its own success.

The NetFree system for Eretz Yisrael users has largely proven this point as in the additional years it has had to expand, the network has become extremely popular for the community there.

Rabbi Heschel said that, based on his observations of the program, he felt NetFree was well positioned to make significant inroads in the American Orthodox community’s internet use as well.

“A very significant percentage of people who currently need internet for business purposes in the United States can already use NetFree now and, over time, that percentage will grow considerably,” he said. “Much depends on the *Nachshonim* — those courageous souls who will be willing to get this program now and help build it so it should become viable for the broader *frum* population. It may mean giving up a little bit on speed in the beginning, but that is a very small cost to pay for a precept as lofty as *shemiras ha’einayim*.”

Aron Einhorn, who works as a typesetter and printing designer, was one of the first NetFree users in America, joining about four years ago. Using the internet mostly for the transfer of large files, banking, graphic design sites and video training demos, he said that the experience has been a purely positive one.

“You have to wait for a new site to be reviewed or picture to open, but it’s not such a problem for me. You get used to it and it’s well worth the level of *kashrus* you’re getting in return,” he said. “With the dangers of internet being what they are, I think it’s worth it for people to try this system and see if it can work for them.” ■