Registrar approaches to the COVID-19 Crisis

Given the severity of the current global COVID-19 pandemic and in view of potential malicious registration of COVID-related domain names and technical abuse at the DNS level, the Registrar Stakeholder Group is sharing some approaches to identifying domains and assessing them for potential harm. It is our hope that this document will be useful for other domain Registrars who are in a position to take similar actions. This document is not meant to be prescriptive, but instead to offer insight into tools and techniques to address abuse.

This is a rapidly-changing situation with no historical precedent. Registrars are adapting as quickly as possible, iterating over time as new information emerges and taking action as they are able, all while helping to ensure the underlying resilience of the domain name system. Any efforts undertaken are on a good faith basis, and in the understanding that different companies have different capabilities, and they fall under different jurisdictions.

It is also important to remember that many COVID-related domain registrations are made for valid and justifiable reasons. We have seen hundreds of domain names belonging to individuals, businesses, and organizations that are disseminating important information and organizing their communities. It is of vital importance that we avoid adversely impacting these services as we undertake any domain registration assessments.

Edits, suggestions, and feedback can be sent to Graeme Bunton, gbunton@tucows.com.

Identifying COVID-19-related Domains

Identifying new COVID-19 domain registrations can be done by a relatively simple database query, though some Registrars may have more sophisticated techniques at their disposal. Domain name Registrars without hosting platforms are typically limited to viewing/analyzing the registered domain string and they likely do not have the tools to include attributes related to website content.

The goal of an identification process is to capture as many related domains as possible, without adding a substantial number of false positives. False positives slow the manual review process down and registration volumes may require at least some optimization for throughput. Registrars may consider adjusting the number of search terms used to cast a wider net, however, practices may differ depending on the volume of the domain database, domain Registrar type and domain registration activity.
For those registrars who opt to search, a suggested list of terms with a reasonably high rate of identifying COVID registrations is (currently): covid, corona, korona, kovid, virus, and pandemic. This list, as well as an expanded version, is also provided as an appendix to this document. In practice, it is suggested that one doesn’t need to search for domains registered prior to 1 December, 2019.

This search does not, of course, capture previously-registered domains, repurposed domains, or domains whose names do not specifically indicate that they might be related to the coronavirus.

Manual Review and Threshold of Harm

In undertaking any proactive review of a domain registration database, a Registrar will typically determine its own threshold of harm. For example, guided by the industry Framework to Address Abuse of the DNS, some signatory Registrars have determined that the sale of tests, alleged vaccines, or cures have the highest probability of being a specific and credible threat to human harm. The primary concern is that the sale of a fraudulent test could result in a false negative for someone who then spreads COVID-19, endangering many lives.

For websites that purport to sell such things, one approach is to reach out to the registrant directly, asking for proof of legitimacy and authorization to sell. Where either cannot be provided, the Registrar may consider limiting the use of the domain. If the Registrar has recommendations or guidelines from their national health regulators, they should follow them.

Hosting companies and eCommerce platforms are generally in a better position to assess issues related to the pricing and sales of masks, antibacterial supplies and even toilet paper. While Registrars may be obligated to, or even choose to take action on domain names corresponding to such activity, it goes beyond the scope of this document to address this market issue.

Additional Initiatives

Throughout this period, Registrars’ normal abuse complaints process will be operating as usual, and are another avenue to address the harms mentioned above. Registrars will take action according to their standard process, notifying relevant authorities as necessary.

Many Registrars will also follow existing best practices to deal with fraudulent domain abuse, eg. assessment of daily acquisitions, cancellations, charge-backs and customer screening. Fraud rules may be adjusted to take account of the new scenario.

Finally, certain Registrars are actively engaged in helping counter the spread of malware, botnets, and phishing attacks, which can be prevalent at this time.
Challenges and Gaps in Process

The Internet is global, as is the current pandemic. As such, there are multiple regulatory bodies that may be relevant in helping assess any particular domain name. The United States’ FDA has a webpage devoted to COVID-19 resources; currently, it notes that there are no FDA-approved diagnostics for COVID-19, so any domain name purporting to sell tests or cures to a US-based customer is violating the law and likely presenting a credible and specific threat to human life. Other jurisdictions may have similar resources, which will be added to the end of this document.

This is a difficult time and the correct action is often unclear; each Registrar will need to assess their capabilities, available tools and resources, and determine for themselves where the threshold of harm lies if taking proactive action on COVID-related domains. No single provider will be an expert in regulations for every jurisdiction around the world, and we would encourage providers to work with local law enforcement to understand frameworks and to keep themselves updated.

It is important to remember that even a partial response is better than none, and action can be taken at various levels. This is an extraordinary challenge that we are all facing, and Registrars wish to play their part with responsible action.

Useful Query Resources

Core Search Terms:
covid, corona, korona, kovid, virus, pandemic

Core Search Terms as SQL list:
"%covid%", "%corona%", "%korona%", "%kovid%", "%virus%", "%pandemic%"

Search exclusions:
coronary, coronado

Helpful Resources for Assessing Domains

National Regulators/Health Agencies
- US FDA COVID19 Resource Page
- DOJ Investigating COVID Related Online Fraud
- Irish Health Agency
- Europol
- ENISA

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