

University of Reading Department of Computer Science

"Investigating the Parallels between using a RATstyle software for malicious Intent and Virtuous Purposes".

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A report submitted in partial fulfilment of the requirements of the University of Reading for the degree of Bachelor of Science in *Computer Science*

Declaration

I, Daniel Broomhead, of the Department of Computer Science, University of Reading, confirm that all the sentences, figures, tables, equations, code snippets, artworks, and illustrations in this report are original and have not been taken from any other person's work, except where the works of others have been explicitly acknowledged, quoted, and referenced. I understand that if failing to do so will be considered a case of plagiarism. Plagiarism is a form of academic misconduct and will be penalised accordingly. I give consent to a copy of my report being shared with future students as an exemplar. I give consent for my work to be made available more widely to members of UoR and public with interest in teaching, learning and research.

Daniel Broomhead April 29, 2021

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Abstract

The constant desire for humans to adapt and evolve, ultimately performing more efficiently has historically been a major driving force for the advancements in technology, humans no longer have the requirement to have physical access to a device, in order to perform maintenance or tasks which would have required this.

Remote Access is not a new concept. Since the Beginning of the internet and the ability of connecting devices together, the idea of controlling and accessing a device from another device has been extremely prevalent. The methods of doing this, the protocols used, and interfaces used have been changed, updated, and refreshed countless times, however the origins of the idea date back decades.

In fact, their uses track back to the early days of the internet, and the mid-late 1990's where tech-savvy kids would commonly use them to scare and prank their friends by controlling their PC's remotely. This could be simple annoyances like ejecting the CD from the CD tray, swapping mouse buttons, or changing the desktop colours. To an unwitting user, it would appear as if a ghost was in control of their device. This is widely accepted as the era beholding the birth of the Remote Access Tools.

Keywords: ... RAT, Remote Access Tool, Remote Administration Trojan, UoRAT

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