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# HTTP-QuSS

HTTP - QUANTUM  
SPEED AND SECURITY



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**GRAPHICAL USER INTERFACE**  
**WHY SPEED MATTERS**



ROCK TECHNOLOGIES

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## **1.0 What is User Experience (UX)?**

User experience is how a person feels when interacting with a system. This includes a website, mobile application, remote desktop, or cloud applications and basically any form of human/device interaction.

### **1.1 The Importance of User Experience (UX)**

User experience is important because it tries to fulfil the user's needs. It aims to provide positive experiences that keep a user loyal to the product or brand. Additionally, a meaningful user experience allows you to define customer journeys on your product that are most conducive to business success.

### **1.2 Why does Speed matter?**

Consumers increasingly rely on mobile to access digital content and services, and if you look at your site analytics, you will probably see this story playing out in your own data. Consumers are also more demanding than they have ever been, and when they weigh the experience on your site or remote Desktop Application, they are not just comparing you with your competitors, they are rating you against the best-in-class services they use every day.

Performance plays a major role in the success of any online venture. High-performing sites or Windows Cloud Applications engage and retain users better than low-performing ones.

So, the Performance has directly impacted the company's bottom line.

### **1.3 Performance is about User Experience**

When it comes to user experience, speed matters. A consumer study shows that the stress response to delays in mobile speed are similar to that of watching a horror movie or solving a mathematical problem, and greater than waiting in a checkout line at a retail store.

As a web site begins to load, there is a period of time where users wait for content to appear. Until this happens, there is no user experience to speak of. This lack of an experience is fleeting on fast connections.

On slower connections, however, users are forced to wait. Users may experience more problems as page resources slowly trickle in.

Performance is a foundational aspect of good user experiences. When sites ship a lot of code, browsers must use megabytes of the user's data plan in order to download the code. Microsoft Cloud Applications are faced with Latency Issues because of the underlying RDP Graphic Streaming Protocol while entering Data or Displaying or changing Window Elements like Combo Boxes, Menu Elements, or simply entering Text in a Text Box. Mobile devices have limited CPU power and memory. They often get overwhelmed with what we might consider a small amount of unoptimized code. This creates poor performance which leads to unresponsiveness. Knowing what we know about human behaviour, users will only tolerate low performing applications for so long before abandoning them.

#### **1.4 Performance is about People**

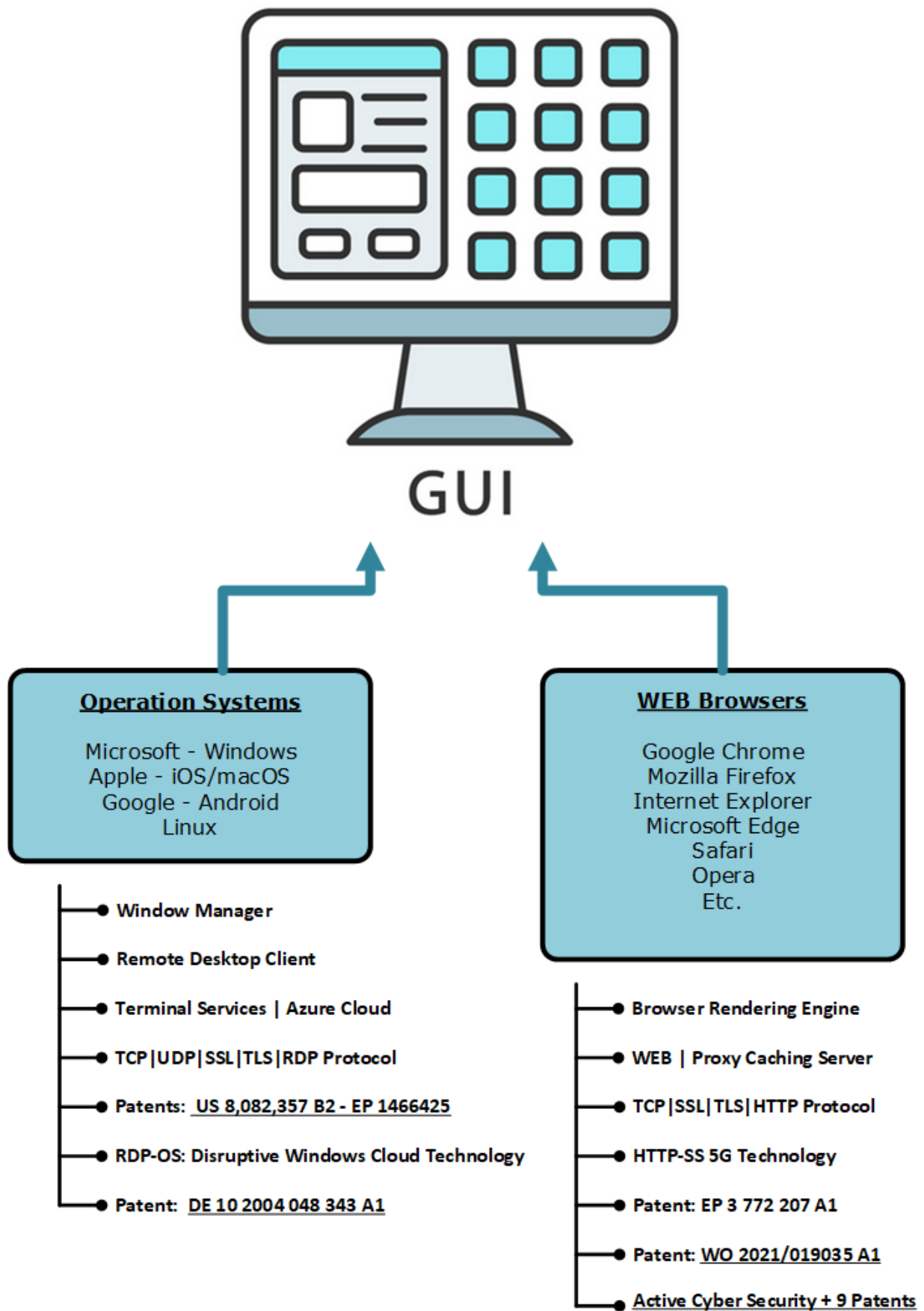
Poorly performing Sites, Terminal Service and Cloud applications can also pose real costs for the people who use them.

#### **2.0 What is a graphical User Interface (GUI)**

The graphical user interface, or GUI, is a form of user interface that allows users to interact with electronic devices through graphical icons and audio indicator such as primary notation, instead of text-based user interfaces, typed command labels or text navigation. GUIs were introduced in reaction to the perceived steep learning curve of command-line interfaces (CLIs), which require commands to be typed on a computer keyboard.

The actions in a GUI are usually performed through direct manipulation of the graphical elements. Beyond computers, GUIs are used in many handheld mobile devices such as MP3 players, portable media players, gaming devices, smartphones and smaller household, office, and industrial controls. The term GUI tends not to be applied to other lower-display resolution types of interfaces, such as video games (where head-up display (HUD) is preferred), or not including flat screens, like volumetric displays because the term is restricted to the scope of two-dimensional display screens able to describe generic information, in the tradition of the computer science research at the Xerox Palo Alto Research Centre.

## 2.1 GUI Platforms



## **2.2 Part of Operation System**

The graphical user interface is part of the operating system and makes it easier for the user to call up application programs, services, and functions.

Some popular, modern graphical user interface examples include Microsoft Windows, macOS, Ubuntu Unity, and GNOME Shell for desktop environments, and Android, Apple's iOS, BlackBerry OS, Windows 10 Mobile, Palm OS-WebOS, and Firefox OS for smartphones.

Microsoft Windows Terminal and Cloud Application graphical User Interfaces are part of the Windows Desktop and Server Operation Systems and are accessed remotely via the Remote Desktop Client using the RDP Protocol.

### **Affected Patents:**

- **US 8,082,357 B2 - EP 1466425**
- **DE 10 2004 048 343 A1**

## **2.3 Dynamically created with the Browser Rendering Engine**

A web browser is a software application that enables a user to access and display web pages or other online content through its graphical user interface.

- **User Interface:** This component allows end-users to interact with all visual elements available on the web page. The visual elements include the address bar, home button, next button, and all other elements that fetch and display the web page requested by the end-user.
- **Rendering Engine:** As the name suggests, this component is responsible for rendering a specific web page requested by the user on their screen. It interprets HTML and XML documents along with images that are styled or formatted using CSS, and a final layout is generated, which is displayed on the user interface.

### **Affected Patents:**

- **EP 3 772 207 A1**
- **WO 2021/019035 A1**
- **Including Active Cyber Security and 9 planned new Patents**