Chee-Wee Chua's Portfolio of Projects

Simple Debugger / Monitor

Launches specified Windows application and monitors its debug messages, loading and unloading of libraries, thread starts and exits, exceptions, and breakpoints.

Skills: Win32 API, Debugger

Blockchain transaction scanner

Scans and tracks transactions on Solana, Polkadot, Polygon, Ethereum on Node.js and encapsulated in a wallet application.

Skills: Node.js, TypeScript, Web3

UpgradeLambda

Upgrades blockchain node software on AWS.

Skills: AWS Lambda, Go

Bitcoin Indexer

Indexes bitcoin transactions to allow it to be searchable.

Skills: TypeScript, Node.js, PostgreSQL

Blue Cross Donations

Donation, and real-time display of donated amount, as well as refunding of donations.

Skills: Solidity, TypeScript, CSS

JSON RPC Framework

A JSON RPC Framework that allows easy dispatching of JSON RPC calls, with Aptos, Bitcoin, Ethereum, Polkadot and Solana clients.

Skills: JSON RPC, Object Pascal
Blockchains: Aptos, Bitcoin, Ethereum, Polkadot, Solana.

WebSockets Framework

The first cross-platform Web Sockets Framework for Delphi, tested against Windows, and Linux for Firefox and Chrome.

Skills: WebSockets, Object Pascal

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Terraform Filesystem Provider

A Terraform file system provider that manages directory and files.

Skills: Go(lang), plugin, filesystem

StopMercuryAttacks

External plugins to the [Mercury SMTP/POP3](#) C++ mail server that prevents brute-force attacks, and adds IPv6 support to it.

StopMercuryAttacks is a Delphi project group consisting of 3 plugin projects:

1. Mercury.Daemons.StopSMTPAttacks
2. Mercury.Daemons.StopPOP3Attacks
3. Mercury.Daemons.MapIPv6

that protects both the Mercury SMTP and POP3 server from the following issues:

1. connections from the same IP within 70 seconds to the SMTP server
2. clients presenting EHLO/HELO with an IP address to the SMTP server
3. multiple AUTHs from the same connection within 5 seconds to the SMTP server
4. multiple failed logins to the POP3 server from the same host

It also provides the following functionality:

1. IPv6 mapping, so that connections via IPv6 are possible.

Skills: Win32 API, DLL integration, SMTP/POP3

SGX Consulting

Worked with an international team (Australia, Singapore, UK, US), which gathered to troubleshoot and fix the Singapore Exchange (SGX) QUEST trading engine as it was running into issues and make recommendations on the way forward.

Skills: Delphi, trading engine, multi-threading