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Announcement
(Internet Connectivity Including Relationship with My Coder Web)

11 June 2018

On Friday 8 June 2018, My Coder Web at www.mycoderweb.com and Chapple Blondet SRL entered into an agreement which provides Chapple Blondet with hosting on the Cloud including website, e-mail, external servers/mainframes (the "Cloud" in contemporary parlance) and consulting services with respect to our systems.[1]

The migration to My Coder Web's systems is actually substantially complete. I can say now, with hindsight, that our systems are already improved in their operation.

As you can see, nothing externally has changed which is fabulous. *E.g.,* my e-mail address remains exactly the same as it has been for well more than a decade.

We have known and worked with the principals of My Coder Web Alejandro and Erik Garro Badilla for some two years as we have established Chapple Blondet's offices here in Trejos Montealegre. They have previously made some meaningful and appropriate contributions to this project with grace and excellence. They have performed with integrity.

[1] Affiliated with My Coder Web is GABA Store at Plaza Atlantis in San Rafael de Escazú. GABA is all about technology, appropriate technology, from classic cast iron wood burning stoves to speakers to the endless and unnecessarily variable cables, connectors and similar for computer systems. The people who work in GABA all know the business and are of endless help in these processes. Their prices are reasonable. Here is a link. The photos do not do proper justice to these great people.
https://www.google.co.cr/maps/uv?hl=en&pb=!1s0x8fa0fc8fc2b3a417:0x436b1993d361b393!2m22!2m2!1i80!2i80!3m1!2i20!16m16!1b1!2m2!1m1!1e1!2m2!1m1!1e3!2m2!1m1!1e5!2m2!1m1!1e4!2m2!1m1!1e6!3m1!7e115!4shttps://lh5.googleusercontent.com/p/AF1QipP-QPeQWBrwUzkmcuhfzcXrmXsp0RT38rvBPB8E%3Dw270-h152-k-no!5sgaba+plaza+atlantis+-+Google+Search&imagekey=!1e10!2sAF1QipP-QPeQWBrwUzkmcuhfzcXrmXsp0RT38rvBPB8E&sa=X&ved=0ahUKEwjYo6yYt8zbAhUow1kKHV6JCRsQoioIgwEwDw

My Coder Web's offices here in Costa Rica are actually eminently walkable from the offices of Chapple Blondet.

A part of this relationship includes providing Chapple Blondet with physical servers and mainframe access where the physical machines are located in:

- The Netherlands (Euro hub)
- Panama (Central and South American hubs)
- Singapore (Asian hub)
- United States of America or "USA" (North American hub)

Needless to say, we have redundant servers here in Costa Rica as well.

This portion of My Coder Web's services allows Chapple Blondet to lease or rent portions of physical machines which have capacity far in excess of that otherwise required and to diversify physical location risks including system backup. This process allows us to achieve a greater level of service and access a greater level of skill sets. This form of relationship is not new. Indeed, this form of human relationship has existed for a millennia or more, well before computing machines were apparently first introduced in Ancient Greece and Ancient Rome as well as Imperial China.[2]

One of the key differences relative to what is typically done today is simple. I know the principals and their colleagues. We know where these physical machines are located and we know who has care, custody, control and responsibility for the machines. The words "transparency" and "integrity" come readily to mind.

These electric based systems, including the internet, are actually not entirely necessary even in this postmodern era. However, they certainly do make a meaningful contribution to efficiency including cost containment when used thoughtfully and appropriately. They must be strong and excellent in physical form and operated by skilled people of integrity.

[2] The abacas and Antikythera mechanism are computing machines. Neither use electricity. There are other examples such as the slide rule.

The Cloud systems properly managed do not typically run on PC operating systems[3] such as the current three globally dominant:[4]

- Microsoft
- Android (google)
- Apple

Indeed, in the context of these larger machines necessary for the Cloud and the software which make them work, COBOL[5] in its contemporary form continues to be very much a part of this and, when properly managed, we believe is optimal. One of the dominant, if not the dominant problem, is education. So, COBOL in its contemporary iteration is, in fact, taught in the universities and institutes here in Costa Rica. As a delightful result, here in Central America and elsewhere we still have people who are trained in these systems as well as operating them with excellence.

Chapple Blondet internally operates on Microsoft operating systems on PCs or "personal computers". The machines in this office with one exception are engineered by me. They are not standard in the context of those one can buy for home use. However, Chapple Blondet's machines are explicitly and harshly engineered to operate with standard systems and software. One primary difference

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[3] I say "typically" as one of the problems centered in USA appears to be attempts at "stringing PC servers" together rather than using proper "big machines". One bit of evidence is photographs from satellites in space showing astounding lines of delivery trucks in traffic jams leading into the buildings which house some of these systems. I truly hope there is another explanation.

Mainframe computers are very large requiring big construction cranes to lift them into buildings. I was involved in one of these installations in my past in connection with certain litigation. The truck required to move that machine was more akin to a very large "flat bed" often used to move construction equipment such as bulldozers. In short, one of these machines would crush a delivery truck assuming one could actually get it into the truck.

[4] There are other operating systems but these overwhelmingly dominate globally. Indeed, to my way of thinking and the thinking of a few others, this is a part of the problem. Three distinctly different operating systems are still a monopoly, private and unregulated in most of its current form. This is one of those circumstances of a natural monopoly. In which case, a tried and true solution is imposition of a regulated "public monopoly" model. Indeed, at least in part of the world, this is the model being imposed to excellent result including for the owners' of capital as well as labor.

[5] Compiling languages such as COBOL and FORTRAN are known as "legacy systems" in portions of US Treasury and infrastructure. Some this software and the attendant machines are 60 or more years old without meaningful maintenance or upgrade. To my knowledge, COBOL and FORTRAN with their origins in the 1940s, 1950s and 1960s are no longer taught in USA schools. As one consequence, there are few people in USA who are trained in this area. This has become a serious problem.

is Chapple Blondet's systems are engineered to operate in English, Spanish, German and French albeit otherwise standard Microsoft operating system.[6]

With respect to Microsoft and other PC operating software, until very recently, we had no choice if we were to continue to prepare USA income tax returns. All of us were stuck in Microsoft's Version 7 for the longest while as Vista[7] was a stunning failure. Today, the Wolters Kluwer USA tax software functions on Microsoft and Android operating systems but not Apple.

We have tested the Android system for about four years. I am not fond of it.

We have been testing Apple's system for about a month. It is not a viable option for Chapple Blondet and, I think, most others.

We have been testing the new Microsoft Version 10 for close to a year. This does seem to be a meaningful improvement over the past.

One key with this very issue is choosing one operating system and standardizing all to that one system. Thus, it appears that we will standardize Chapple Blondet to the Microsoft operating system with full upgrade. We will continue to operate these systems in English, Spanish, German and French.

Alejandro and Erik are certainly a part of this decision making process. I listen to them very closely. They are *maestros* to me.

This will lead us to introducing new bookkeeping software.

This is part of the process of introducing into Chapple Blondet and offering to our clients full global paperless file management systems including via these remote servers with appropriate back up and security as well as intelligent, educated and thoughtful people who own and operate them.[8]

In terms of going "paperless", I was the first to take a multinational engagement (45 countries, 35 currencies and 35 languages) to full paperless in the mid-1980s. The project involved a large industrial concern centered in Germany.

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[6] Another difference is Chapple Blondet has two parallel fiber optic wiring systems in this building, one of which includes a copper trickle charge through it. Batteries are a big time problem both as a practical matter and in terms of contamination. The trickle charge greatly reduces the need for batteries.

We have a third full bore wireless system installed and operating which is not WiFi.

[7] Vista's problems were not limited to USA tax software. Vista was one of the most curious fiascos. Thus, I know of no one who uses or used Vista.

[8] Chapple Clonde continues and will continue to maintain paper based systems. When one implements a "paperless system", the traditional paper files simply retain their archival function. This is one of the problems today. *E.g.*, "electrons" do not archive well as they do, in fact, physically degrade with the passage of time, sometimes rather rapidly. There are other issues.

With respect to these systems, we did this in our offices in USA. Among other matters, my mid-town Manhattan office was able and did participate in the management of that awful day known as 911.

My offices in New York City were rather close to those towers but we were able to maintain physical and mechanical integrity without interruption. So, portions of the systems in those towers were in the moment downloaded into our systems providing continuous ongoing uninterrupted service which was critical in literally saving human lives. Law, accountancy and conveyancing systems are essential in operating emergency management systems.

Thus, once we are complete, Chapple Blondet will be fully capable of functioning in these troubled times. We can do so today but on a more limited basis.

As we have mentioned before, these systems go to the very heart of meeting the challenge of "global climate change". Among many issues, computers and the internet consume a huge amount of energy which, in its direct form, is typically electricity. But electricity does not come out of the ether. It largely sources in carbon based energy and that substance one should not reference with no known process to safely contain the waste.[9] So, proper configuration, proper machines and cables, proper software and then proper use and management all go directly to reducing contamination as well as reducing operating costs.

I have imbedded below an article including maps and photographs showing some of the physical reality of today's internet. Some of my former clients were those who built and capitalized a portion of the satellites and under-sea cables which drive this system to this day.

The first of the undersea cables was laid in 1858.[10] It really is fascinating and a testament to human ingenuity.

Once again, I so appreciate our clients and colleagues' patience and assistance in these processes.

[9] Costa Rica is a notable global exception. CNFL, our public monopoly, which supplies our grid based electricity, generates nearly 100% of our electricity via renewable source such as water and wind. We have done this for decades, long before I immigrated the firm to this great republic.

[10] 1858 is not a typographical error. A lot of this technology which is labeled "new" in the propaganda mills is nothing of the sort. This should actually be viewed as positive. Uniformly, tried and true technology in current extensive use is far stronger, more stable and optimized relative to the "latest and greatest new tech".

"New tech", by definition, has a far higher fail rate. This is one of Chapple Blondet's and our predecessors' areas of expertise – managing the downside risks inherent in "new technology" and managing rapid change. We and our clients have been and continue to be innovators.

The article with photographs and maps follows:

From Business Insider: https://www.businessinsider.com.au/how-internet-works-infrastructure-photos-2018-5

TECH INSIDER

Fibre optic wires, servers, and more than 550,000 miles of underwater cables: Here's what the internet actually looks like

PRACHI BHARDWAJ
JUN 10, 2018, 8:57 AM

Flickr/Official U.S. Navy PageDivers remove corroded zinc anodes from an undersea cable near Hawaii.

Every second, millions of emails, clicks, and searches happen via the world wide web with such fluidity that the internet seems almost omnipresent. As such, people often mistakenly assume that internet traffic happens by air – our mobile devices, after all, aren't wired to anything.

But satellites carry less than 1% of human interactions, and in some ways the truth is far more impressive than messages sent by tower signal.

The internet – arguably the most important resource in the modern world – is very tangible and fairly vulnerable. It exists in large part under our feet, by way of an

intricate system of rope-thin underwater and underground cables hooked to giant data storage units so powerful, they're capable of recalling any piece of information at a moment's notice.

Here's what the infrastructure of the internet actually looks like today:

In the most basic sense, the internet's job is to carry information from point A to point B.

Those points are IP addresses – the unique codes that identify locations around the world – and they're what your devices are linked to when you're connected to the internet. Curious what yours is? If you type "My IP address" into Google, the search engine will bring it up.

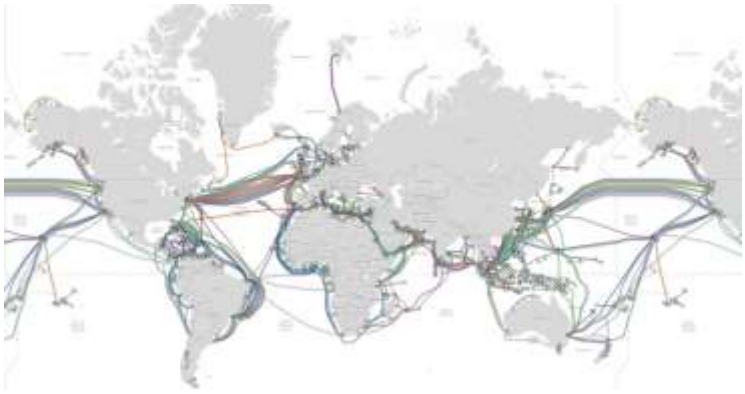
As it travels, any information transferred over the web arrives at internet data servers, which live in data centres around the world. In 2008, an estimated 9.5 trillion gigabytes passed in and out of the world's servers — but more on those later.

Data Center Maps powered by Google MapsThe Data Center Map website uses Google Maps to pinpoint all of the data servers around the world.

Moving information to and from servers often involves crossing oceans. We rely almost entirely on cables for internet traffic because they're faster and cheaper than satellites, but laying them across bodies of water is a tedious process that's taken almost 200 years and requires a lot of maintenance.

David GreerAT&T manhole cover, San Luis Obispo CA

To get the internet to what it is today, humans have slowly laid over 300 underwater cables that run a total of 550,000 miles.



Submarine Cable Map

About 97% of all intercontinental data is transferred through these cables, according to the Asia-Pacific Economic Cooperation forum.

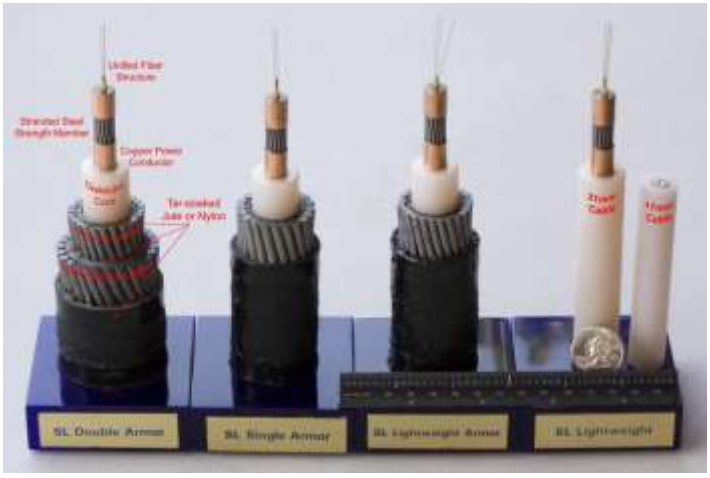
If the world's underwater cables were laid out end-to-end, the cables could extend from here to the moon and back again, and then wrap around the earth's widest point almost three times.

The longest cable is about 24,000 miles long. It extends from Germany to Korea and even further south to Australia, hitting 39 different landing points along the way.

Submarine Cable Map

SeaMeWe-3 underwater internet cable, ready for service in September 1999. The first transcontinental cable was laid down in 1858, and ran from Ireland to Newfoundland.

There are a few different types of cables used underwater, ranging in thickness from a garden hose to about three inches in diameter. The lightest (far right) are laid primarily in the deep ocean floor.



Wikimedia

At the heart of the cables are the fibre optic wires that transmit information, protected by water-resistant petroleum jelly and layers of stranded metal.

Laying each cable down requires several months, millions of dollars, and a very large ship with miles of cable coiled up onboard.

Flickr/Giulio Verne

Some cables are laid as deep as 25,000 feet below the surface of the ocean, meaning they're subject to damage from natural disasters, corrosion, fishers, and even shark bites.

Flickr/Official U.S. Navy PageDivers remove corroded zinc anodes from an undersea cable near Hawaii.

Break repairs are handled by special ships with small hooks that pull the cable up or cut it in two and bring both halves up for mending. At least 50 cable breaks a year happen in the Atlantic alone, according to MIT Tech Review.

The cables come back to shore at cable landing points and make their way to data centres by travelling underground. Maintenance and planning for underground cables is easier than underwater cables in some ways (like the fact that they don't have to deal with shark bites) but still challenging in other ways.

David GreerHibernia Atlantic transoceanic cable landing, Lynn MA

In the US, there are 542 cables (depicted by the yellow lines) connecting at 273 different points (depicted by the blue squares).

Business Insider

The first publicly available map of the US's cable network wasn't available until 2015. It took Paul Barford and his team of researchers almost four years to pull it together.

The ecosystem of cables depends largely on the country's infrastructure. In the US, for example, most of the long-haul cables are located along major roads and railways.

Business Insider

For cables under dry land, construction is a big concern. To prevent the cables from being dug up, they're laid alongside gas pipes or inside old pipelines, with aboveground markers along the way.

David GreerUnderground fibre optic cable marker, Yorkville CA

Similar to underwater cables, cables in dry ground are subject to damage from natural disasters, like earthquakes.

David GreerUnderground fibre optic cable marker, New Jersey

The cables eventually reach the aforementioned data centres, and navigate to the machine servers.

David GreerFacebook data center, Des Moines IA

These are typically unmarked buildings located in both rural areas far outside of city limits…

David GreerGoogle data center, The Dalles OR

…and in buildings within highly populated cities, hidden in plain sight.

David GreerOne Wilshire data center & Telecom Center LA, 624 South Grand Ave. & 530 W. 6th St., Los Angeles CA

In fact, one of the world's most concentrated hubs in terms of internet connectivity is located in lower Manhattan at 60 Hudson Street.

Ben Mendelsohn/Vimeo60 Hudson St

A company called Telx operates out of the 9th floor, where local, national, and global channels come together to transmit data.

And there are two other major hubs in New York, located at 111 Eighth Avenue — the old Port Authority building that Google recently purchased for $US1.9 billion — and 32 Avenue of the Americas.

David GreerAT&T Long Distance Building, 32 Avenue of the Americas, New York NY

Each data center consumes massive amounts of energy. Apple recently built two 100-acre solar energy installations to help power its North Carolina data center, which requires 20 megawatts of power at full capacity. That's enough to power a little over 3,000 homes.

David GreerApple's 14MW solar array, Maiden NC

Pretty high-maintenance, but necessary.

They're filled with "deafeningly noisy rooms cocooning racks of servers and routers," where you're "buffeted by hot and cold air that blusters through everything," according to designer and artist Timo Arnall who documented a large< a href="http://www.elasticspace.com/2014/05/internet-machine" target="_blank">European data center called Telefónica.

Timo Arnall/VimeoData center run by Telefonica in Alcalá, Spain

The ceilings have to be 12 to 14 feet high to support rising heat from the servers. Philadelphia Internet Exchange's ceilings, for example, has 12-foot ceilings.

David GreerPhiladelphia Internet Exchange, 401 N. Broad St. Philadelphia PA

If that doesn't sound like a place you want to spend your time, keep in mind that you don't really have a choice: data centres are very difficult to get into. The bigger data centres like Telefónica have "security far higher than any airport," said Arnall, who had to get special permission.

David GreerLobby at 32 Avenue of the Americas, New York NY

From the outside, these unassuming buildings serve as the most glaring proof we have that the internet is more physical than we think.

David GreerTelx ATL1 and ColoAtl, 56 & 55 Marietta St., Atlanta GA

A constant aboveground reminder of everything it takes to keep the world wide web afloat.