



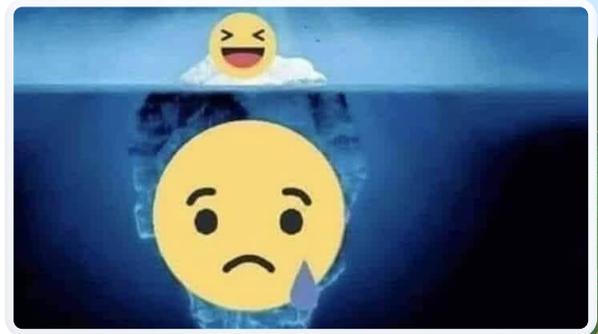
# UI, UX, and the Registry/Registrar Landscape

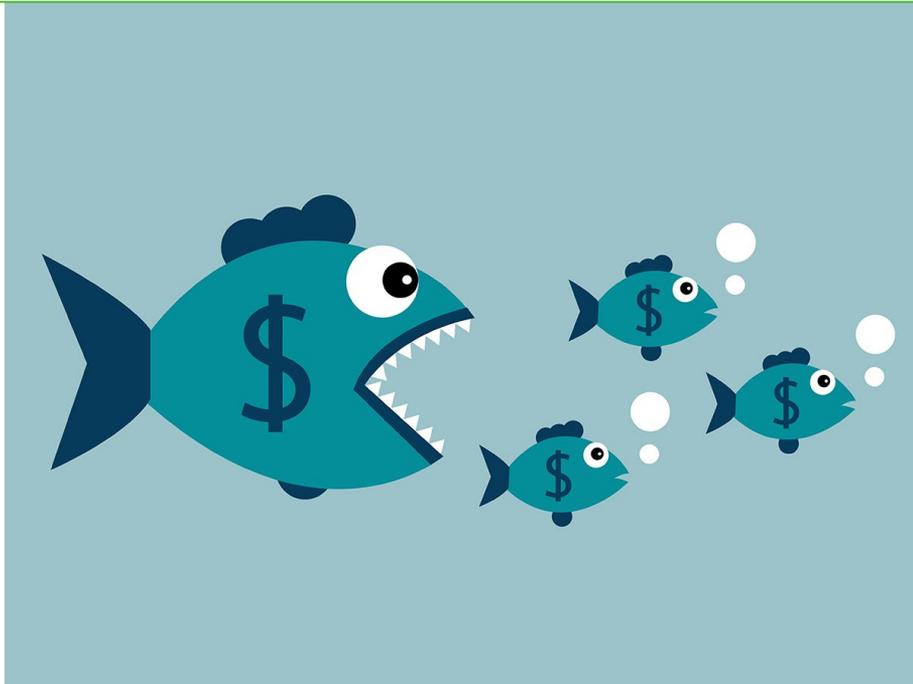
None of these things are like the others

David Lawrence, Software Engineering Architect

[d.lawrence@salesforce.com](mailto:d.lawrence@salesforce.com)

22 Oct 2022, Belgrade, Serbia





Hopefully our acquisitions are more symbiotic than this.



As a large multinational corporation, Salesforce generally does 6-10 acquisitions per year. Most acquired companies have their own DNS assets that need to be transferred into Salesforce's ownership and operations.



The external DNS team at Salesforce is around 10 people strong, and when looking for people to work these transfers, well I blinked when everyone else stepped back. I wanted to use an animated gif from the Jungle Book of a line of elephants doing that, and label a couple of those figures "Shumon" and "Pallavi, but wasn't sure if the animation would work so Community it is. From experience, others had already discovered that there were myriad issues that made both registration and operations transfers a bit annoying.





**twicinski** Yesterday at 11:52 AM

Yes, though when I reached out to legal when I first started asking if I could help they were so happy "we can't get anyone in technology to advise us".

also network folks had no interest in the RiRs which I felt would end badly

It's an area where you need a 🏠 ton of knowledge and expertise but its highly non-technical work



Tim Wicinski said this to me in Discord recently when he saw that I'd be giving this talk, as he had previously had the responsibility. This is the space that I work in, facilitating the needful for the corporate M&A people who do not have the expertise in this area. Ideally they, or staff from the acquired company, would handle at least the registration part if not operations, but we've found that even that is best handled by the DNS team. I'd say he's only half-right about the level of technicality.



## Easy As Pie. Mmmm, Pie.



**Get  
Domain  
Name  
List**

**Update  
Salesforce  
Ownership**

**Move  
To Our  
Registrar**

**Consolidate  
Operations**

Guess we don't need the rest of this talk.

You'd expect it to be a relatively straight forward process. Get a list of domain names, update the registrations to point to Salesforce, consolidate into our standard registrar, and move operations to our standard providers. Maybe a couple hours of work for a few dozen names, right?



Of course not. Okay, okay, it usually doesn't rise to level of dumpster fire, but it can be surprising the number of times some attempts go back and forth until everything gets sorted out.



Before I get into it, I want to point out that though most of the anecdotes here will be a bit critical, my point is not to name and shame. While I'll be using screenshots that some of you might recognize -- perhaps from your own sites -- and I also show real domain names that could pretty easily be sleuthed, I've mostly not included any direct references to the providers involved.



Some of this is because I have a great deal of empathy for many of the people who have had to implement these interfaces. Between priorities, timelines, bugs, et cetera, things can exist in a less-than-desirable state for a while. Some of you may recall that I've taken a few of my own shots for the long time for a former employer failing to roll out fixes to a demonstrable DNS protocol problem as quickly as anyone -- especially me -- would have liked. I'm not here to launch shots at anyone else.

## Types of deceptive design

### Trick questions

While filling in a form you respond to a question that tricks you into giving an answer you didn't intend. When glanced upon quickly the question appears to ask one thing, but when read carefully it asks another thing entirely.

### Sneak into basket

You attempt to purchase something, but somewhere in the purchasing journey the site sneaks an additional item into your basket, often through the use of an opt-out radio button or checkbox on a prior page.

### Roach motel

You get into a situation very easily, but then you find it is hard to get out of it (e.g. a premium subscription).

### Privacy zuckering

You are tricked into publicly sharing more information about yourself than you really intended to. Named after Facebook CEO Mark Zuckerberg.

Plenty more for your perusal at <https://deceptive.design/>



Also, while I'm pretty confident that a lot of what I encounter are not deliberately dark patterns, I'm also pretty confident that some of them are, but that it likely wasn't the fault of whoever implemented them yet rather a requirement pushed down from above. The registrar business is notoriously low margin, and I'm not surprised that registrars are disinclined to reduce the friction of bulk moves away from their platforms.



## No Data Available

There is no data to show you  
right now.

Continue



Finally, as mentioned earlier, this talk is largely anecdotes not research. If you're looking for some hard data, sadly you'll not find it here.





Registrant Name: Domain Administrator  
Registrant Organization: Salesforce.com, Inc.  
Registrant Street: Salesforce Tower, 415 Mission Street, 3rd Floor  
Registrant City: San Francisco  
Registrant State/Province: CA  
Registrant Postal Code: 94105  
Registrant Country: US  
Registrant Phone: +1.8006676389  
Registrant Phone Ext:  
Registrant Fax: +1.4159017040  
Registrant Fax Ext:  
Registrant Email: registrar-updates@salesforce.com



Let's start with the basic issue of wanting the registration to publically reflect Salesforce's ownership. One of the very first issues we run into is the matter of ICANN's 60-day Change of Registrant lock. By default registrars can block a transfer away for 60 days following any update to the registrant name, organization, or email address.





Transfer domain to another  account

Transfer domain away from 

Transfer available on November 19, 2022.



While ICANN allows for registrars to offer an opt-out, it isn't required to be implemented. Good handling at least warns of the potential issue before the change is committed, independent of whether the registrar can offer an opt-out. Even better handling of it will provide a timer somewhere that shows how long it is before you can do the transfer. The worst handling of it is no warning at all that the lock will be imposed and yet still make it appear that a transfer is available, including by dispensing transfer codes that will inevitably be rejected when used.



|                 | Registrant Contact  | Admin Contact   | Tech Contact  |
|-----------------|---|---|---|
| Contact Type    | Company   | Company   | Company   |
| First Name      | <input type="text"/>  | <input type="text"/>  | <input type="text"/>  |
| Last Name       | <input type="text"/>  | <input type="text"/>  | <input type="text"/>  |
| Organization    | <input type="text"/>  | <input type="text"/>  | <input type="text"/>  |
| Email           | <input type="text"/>  | <input type="text"/>  | <input type="text"/>  |
| Phone           | + 1 · 3115550188<br>Enter country calling code and phone number | + 1 · 3115550188<br>Enter country calling code and phone number | + 1 · 3115550188<br>Enter country calling code and phone number |
| Address 1       | <input type="text"/><br>Street address, P.O. box                | <input type="text"/><br>Street address, P.O. box                | <input type="text"/><br>Street address, P.O. box                |
| Address 2       | Optional<br>Apt, suite, unit, building, floor, etc.             | Optional<br>Apt, suite, unit, building, floor, etc.             | Optional<br>Apt, suite, unit, building, floor, etc.             |
| Country         | United States   | United States   | United States   |
| State           | California  | California  | California  |
| City            | <input type="text"/>  | <input type="text"/>  | <input type="text"/>  |
| Postal/Zip Code | <input type="text"/>  | <input type="text"/>  | <input type="text"/>  |




Even when you're willing to take the potential 60-day lock hit, just updating ownership information at the registrar can be fraught. Many do not offer any sort of bulk update operation, with one of the most frustrating being for well over 200 domains that were held at a major provider which also required that the data for all three contact types be set independently.

|                        | Registrant Contact  | Admin Contact   | Tech Contact  |
|------------------------|---|---|---|
| <b>Contact Type</b>    | Company<br>No results match "Salesforce.com, Inc"               | Company   | Company   |
| <b>First Name</b>      |   |   | Domain  |
| <b>Last Name</b>       | Administrator   |   |   |
| <b>Organization</b>    | Salesforce.com, Inc   | Salesforce.com, Inc   | Salesforce.com, Inc   |
| <b>Email</b>           | registrar-updates@salesforce.com                                | registrar-updates@salesforce.com                                | registrar-updates@salesforce.com                                |
| <b>Phone</b>           | + 1 . 3115550188<br>Enter country calling code and phone number | + 1 . 3115550188<br>Enter country calling code and phone number | + 1 . 3115550188<br>Enter country calling code and phone number |
| <b>Address 1</b>       | 415 Mission St<br>Street address, P.O. box                      | 3rd Floor<br>Street address, P.O. box                           |   |
| <b>Address 2</b>       | Optional<br>Apt, suite, unit, building, floor, etc.             | Optional<br>Apt, suite, unit, building, floor, etc.             | Optional<br>Apt, suite, unit, building, floor, etc.             |
| <b>Country</b>         | United States   | United States   | United States   |
| <b>State</b>           | California  | California  | California  |
| <b>City</b>            | San Francisco   | San Francisco   | San Francisco   |
| <b>Postal/Zip Code</b> | 94105   |   |   |




Even auto-fill was only a marginal help on the form, as in Chrome it took five separate box selections to get the patchwork fill shown here. Tab doesn't work great either, though it's been improved since the last time I tried to do updates at this site. Now at least tab will consistently move down the column of each contact, whereas previously it was an erratic walk across the form. Down the columns is less helpful than across the rows though; you can't as easily fill a field then copy and paste it into the adjoining columns with primarily keyboard input.



**i** When you change [Contact Type](#), [First Name](#), [Last Name](#), [Organization](#) for the registrant contact, you change the owner of the domain. ICANN requires that we email the current and new registrant contacts to get approval. There is **no charge** for this change. If you want to change the owner of the domain, click Continue when you're finished changing the contact information. To revert the changes to the registrant contact that caused the change in ownership, click Revert Ownership Changes.

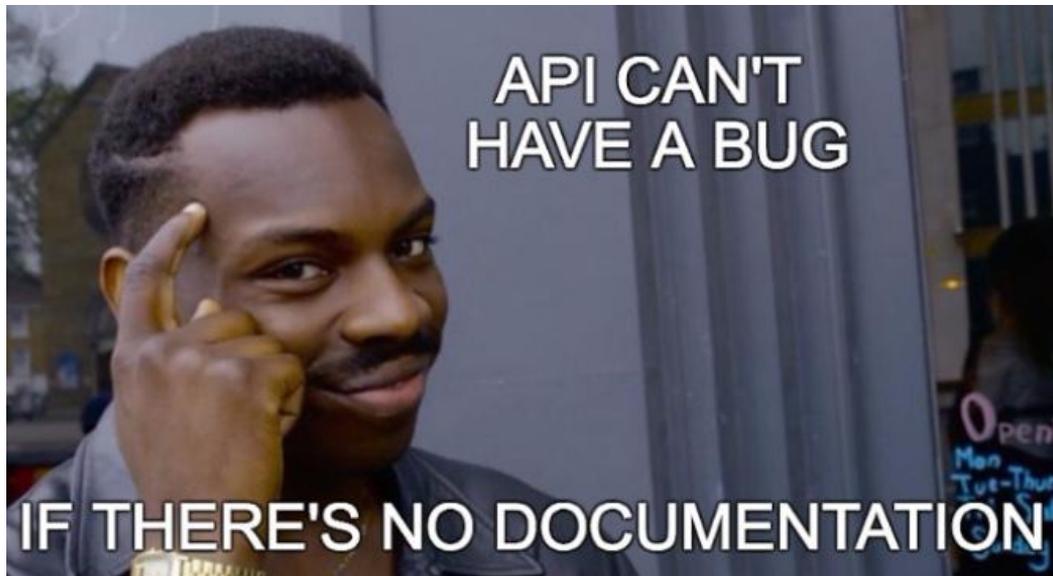
Revert Ownership Changes

The button, it does nothing!



To add a further subversion of expectations, when making this example I went into one of our existing domains and the instant I cleared out a box that would have triggered the 60-day ICANN lock, it did pop up a warning message, though without describing the lock issue. The subversion was that the box included a button to revert changes, a button which appeared to have no more function than to make the warning box go away without actually resetting the fields. Fortunately there was an always-present Cancel button at the bottom of the form, making the Revert button superfluous.





In fairness, there is a lot of documentation for the API. Just not this notable part.



You may have noticed that I called this out as at a "major provider" earlier, and thought something like, "surely they have an API that you can just iterate over!". Yes, yes they do. At the time that I was trying to get these nearly dozen score domains updated, though the API provided a mechanism for making contact updates it turned out that it couldn't actually make the desired updates thanks to an undocumented constraint (apparently still undocumented, but maybe no longer a constraint) on changing the ICANN-triggering data.





Did I mention? ON A FRIDAY.



Eventually this brought up yet one more issue. We were able to engage customer support and eventually convince them to push through the changes in bulk on their backend, and also to supposedly file some change requests to improved the process, but that seems largely unchanged over a couple of years now. When they did the bulk update on a Friday it triggered a flurry of email messages that needed a positive acknowledgement with 48 hours to allow the change. On a Friday. ON A FRIDAY.



Alternative image: imagine Kenneth from 30 Rock being shaken at the shoulders by someone demanding, "What's the frequency, Kenneth?!"



I've also encountered issues where ownership updates are rejected by the registry in ways that are confusing at the registrar, and I'll cover that a little more later when I shift focus to registries. Suffice to say that all of these different issues eventually led to a procedure update where my normally preferred path is to just go straight to trying to get transfer codes and letting the experts at our registrar deal with the vagaries of the relevant data updates. While it unfortunately slows down the ownership change (for reasons to be covered later) it also avoids the ICANN locks and lowers my blood pressure ... a little. It's not like getting codes is really that easy, either.

### Export

Want to manage your domains through our API? You'll find it at: [\[link\]](#) ×

Report name \*

Export options

Display columns

Columns in view  All columns

File format

CSV  XML

File Compression

None  GZ  ZIP

Include domain authorization codes?

In order to ensure your contact info is being transferred to the new registrar we will have to turn off your Privacy Settings and replace our proxy/private contact with yours. By proceeding with this transfer request you consent to us turning off privacy. This could cause your contact info to be available in the public WHOIS.



So, getting transfer codes. I'll start with a pretty good way to handle it: bulk download of codes for multiple domains, with a couple of different format options even. While I have some minor quibbles with the UI for how this provider does it, the most notable is that getting the codes doesn't automatically turn off transfer locks, so there's an extra step there but that can be done in bulk too. (I'll come back to that bit at the top about the API later.)



The transfer locks issue bears a little mention because it does come up where I can get a code and request a transfer but then get poor feedback about why the transfer failed. Sometimes it is obvious that the issue is a lock that didn't get turned off, but other times there's no effective error message even though it was indeed a transfer lock, or an enhanced lock service, that was the cause.



**YO DAWG I HEARD YOU LIKE CONFIRMATIONS**

**SO I PUT SOME CONFIRMATIONS IN YOUR  
CONFIRMATIONS SO YOU CAN CONFIRM WHILE YOU'RE CONFIRMING**

imgflip.com



Other providers can be much, much worse about getting codes, deliberately increasing the friction to keep you from leaving. Here's one of the more notable ones. Let's count up the interface steps needed to finally get a code here. Note that this cannot be done in bulk at this provider, so though I might be inclined to give needing to click on the domain name a pass since obviously you've got to start somewhere, that I've got to do it for every single domain means it counts.

The screenshot displays a domain management interface. At the top left, there is a filter for "Uncategorized" domains. A list of four domains is shown:

- bigkiteconsulting.com**: Expires: 8 Nov 2022, Renewal: Auto. A yellow badge indicates it is "< 60 days" from expiration.
- bigkitecrm.ca**: Expires: 16 Apr 2023, Renewal: Auto.
- bigkitecrm.com**: Expires: 16 Apr 2023, Renewal: Auto.
- dev-tractionondemand.com**: Expires: 13 Jan 2023, Renewal: Auto. This domain is selected with a checkmark.

Below the domain list, there are four service categories for the selected domain:

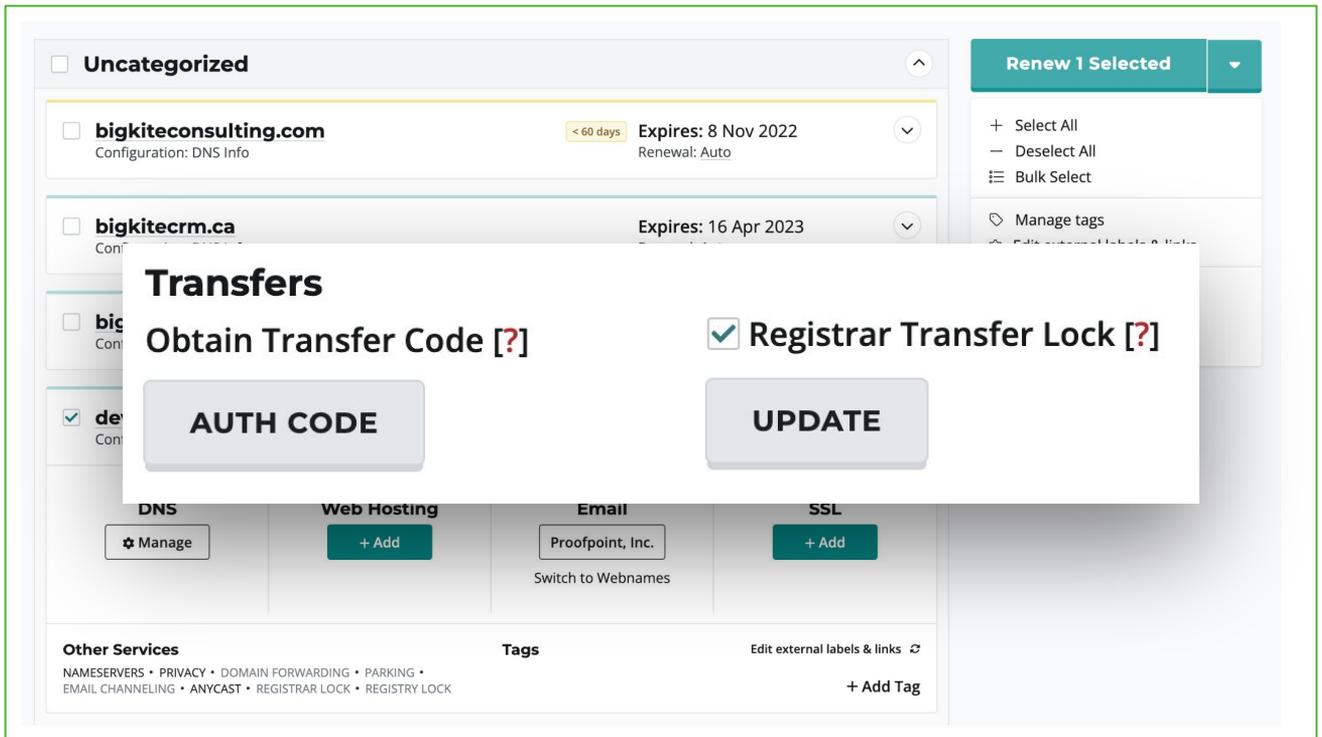
- DNS**: Manage
- Web Hosting**: + Add
- Email**: Proofpoint, Inc. (Switch to Webnames)
- SSL**: + Add

At the bottom, there are sections for "Other Services" (listing NAMESERVERS, PRIVACY, DOMAIN FORWARDING, PARKING, EMAIL CHANNELING, ANYCAST, REGISTRAR LOCK, REGISTRY LOCK), "Tags", and "Edit external labels & links" with a "+ Add Tag" button.

On the right side, a sidebar shows a "Renew 1 Selected" button and a list of actions:

- Select All
- Deselect All
- Bulk Select
- Manage tags
- Edit external labels & links
- Forward domains
- Assign name servers
- Auto renewal

One, to select the domain. Yes there's a bulk select interface, but it does no good toward enabling transfers. In later steps I'll be overlaying each new interface element; the actual process variously involves overlays or full page transitions.



Two and Three, You normally have to scroll down on domain page to get to these buttons even with a large display area, then click. The only reason that this isn't also four and five right here is that they kindly automatically turn off the transfer lock when you request the auth code. The first time I saw this I thought I'd be able to see the Auth Code just by clicking the button – I know of at least one registrar that does that! – and I had no idea what was really in store.

**Uncategorized** ^

**bigkiteconsulting.com** < 60 days Expires: 8 Nov 2022 v  
Configuration: DNS Info Renewal: Auto

**Renew 1 Selected** v

+ Select All  
- Deselect All

### Obtain Domain Authorization Code And Unlock

Transferring this domain to another Registrar involves two steps:

1. Obtaining the Transfer Authorization Code
2. Unlocking the domain, making it available for transfer

If you wish to transfer this domain to another Registrar, begin by clicking on **Continue** to obtain your transfer code and to unlock the domain.

**CONTINUE** **CANCEL**

**Other Services** **Tags** [Edit external labels & links](#) v

NAMESERVERS • PRIVACY • DOMAIN FORWARDING • PARKING •  
EMAIL CHANNELING • ANYCAST • REGISTRAR LOCK • REGISTRY LOCK

+ Add Tag

Four. While the information is useful to the novice, it could also have been included in the function of the following panel.

## Domain Transfer Authorization Code and Unlock

**Domain name:** dev-tractionondemand.com

Before we supply you with an authorization code to transfer your domain to another provider, please take a moment to let us know why you are transferring your domain.

**Please note that if you choose to transfer this domain to another registrar, any Webnames-provided webhosting, email, or DNS services will continue to function and renew unless explicitly cancelled.**

Reason:

-- Select --

Comments:

CANCEL

CONTINUE

What? NO! I don't owe you any explanations, certainly not for each of dozens of domains I'm trying to process. Yet here are interface interactions five and six (activate the Reason box and make a selection), seven (activate the Comments box, because it is required), eight (to enter a comment, which I'll limit only to only counting as 8 because I discovered that entering a single character was sufficient to satisfy the requirement for a comment), then finally nine to click Continue.

## Domain Transfer Authorization Code and Unlock

### Domain Transfer Authorization Code and Unlock

Domain name: dev-tractionondemand.com

### We're sorry to hear you're considering another provider.

Here are three quick reasons to move your domains to **Webnames** instead:

- **Reason 1:** We're **Webnames** through and through, and we're here to stay. 20+ years in business, no foreign ownership or control. We use **Webnames** datacenters, secured by robust data protections under **GDPR** law. Know who you're dealing with and where your data and services are with **Webnames**!
- **Reason 2:** We pride ourselves in the quality of our **Webnames** customer support. You can count on our experienced support staff to help you troubleshoot issues and derive value from your services with **Webnames**.
- **Reason 3:** **Webnames** has very competitive pricing options available to owners of multiple domains. For example, **pay just \$1.99 / year, or less,** for your domain registrations AND renewals when you have 5 or more in your account! Discounts are applied automatically - no need to ask!

For a full list of available pricing options, please visit our [Pricing page](#).

Consolidate your domains with Webnames and save big on all your registrations, transfers and renewals. Need more info? Give us a quick call, or we can call you. **Webnames** You'll be glad you did.

PLEASE CONTACT ME ABOUT PRICING OPTIONS

PROCEED TO AUTHORIZATION

CANCEL

CONTINUE

Ugh. Just ugh. Ten.

## Domain Transfer Authorization Code and Unlock

### Domain Transfer Authorization Code and Unlock

Domain name: dev-tractionondemand.com

### Domain Transfer Authorization Code and Unlock

Domain name: dev-tractionondemand.com

- Domain: dev-tractionondemand.com
- Transfer Authorization Code: wn2022U\$\$3j5pkaw
- Status: Unlocked

RE-LOCK

Consolidate your domains with Webnames and save big on all your registrations, transfers and renewals. Need more info? Give us a quick call, or we can call you. You'll be glad you did.

PLEASE CONTACT ME ABOUT PRICING OPTIONS

PROCEED TO AUTHORIZATION

CANCEL

CONTINUE

Hooray, we're there! But, you know, ... 11 and 12 because you've got to copy and paste it somewhere useful. And you know what really gets me? RE-LOCK. Are you kidding me? After all that? Why would you even put that button there after my perseverance has clearly indicated my intentions. It's like those marketing list unsubscribe pages. "Click here if you accidentally confirmed your intention to unsubscribe." Yeah, right. Who does that?!



Slow, yes, but thankfully I haven't had to deal with actual paper mail for domains in a very long time.



Another thing that provider did to make my life better is provided the code right on the web page. Others insist on mailing the code to the registered contact address, which is a perfectly understandable approach yet still cumbersome for this kind of work. The problem arises in that since we're avoiding changing the contact address, the existing one generally goes to an address at the acquired company, and that can often be to an address that doesn't have anyone actively monitoring it or is even being diverted to null. (Atypical, but still encountered.) In the worst case it might be a mailbox no one even has access to anymore. We have one domain that's been in that state for a while now, but is fortunately just parked anyway so we've not yet gone through the necessary extra effort to sort it out.



```
; ls Transfer* | wc -l
10
; grep -h Authorization-Code: Transfer* | wc -l
10
; grep -h Authorization-Code: Transfer*
br>=0A<br>=0AAuthorization-Code: 9xx*eTW3+vR-*6P9<br>=0A<br>=0ADa Sie mi=
br>=0A<br>=0AAuthorization-Code: UNIT-25GJ-ZQLC-CM9Y<br>=0A<br>=0ADa Sie=
Transfer<br>=0A<br>=0AAuthorization-Code: /+9R-x7hibJ4FV-4<br>=0A<br>=0A=
ransfer<br>=0A<br>=0AAuthorization-Code: 6-9F*/usk2PkRV/7<br>=0A<br>=0AD=
Authorization-Code: 2.PVF8%Ty2pn!3%q
Authorization-Code: 2.PVF8%Ty2pn!3%q<br>
r>=0A<br>=0AAuthorization-Code: Bc/4qqA6H/-6+Q3i<br>=0A<br>=0ADa Sie mit=
r>=0A<br>=0AAuthorization-Code: UNIT-2QQ5-ZZQE-LGJE<br>=0A<br>=0ADa Sie=20=
2<br>=0AK=C3=BCndigungsgrund: Transfer<br>=0A<br>=0AAuthorization-Code:=20=
2<br>=0AK=C3=BCndigungsgrund: Transfer<br>=0A<br>=0AAuthorization-Code:=20=
```



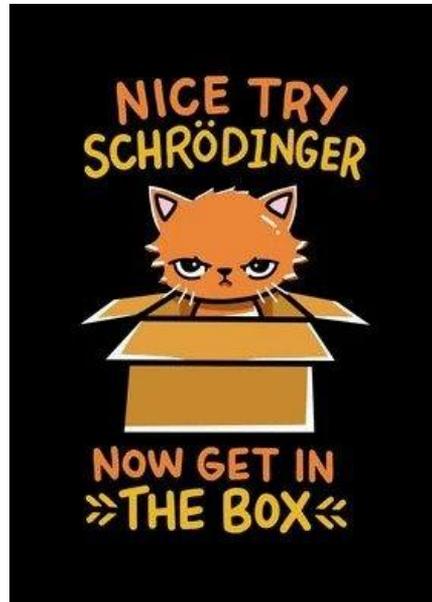
Separate messages for the code for each domain can be difficult in a few different ways. One is just coming up with an efficient way to grab the codes out of the messages. You'd think this would be some pretty easy grepping for any given provider, but I've encountered at least one where the format of the message apparently depends in part on which TLD the domain is in. In this small capture of a subset of messages I got recently from that provider, it looks promising that a simple grep would be able to grab the right data, but a closer inspection shows that a couple of the lines don't even include a code, one of the the lines is actually two hits in the same file (though only one would hit if the full capture looked for a final <br>), thus one file is missing (because it used German "Autorisierungscode" instead). That this could be done with a beefier script really isn't the point ... or maybe it is.





As you saw in the prior shot, you basically need a full, proper email parser to handle encoding issues and making sure your filter can sort out things like base64, quoted-printable, and HTML entity encoding. Then I've also experienced issues with a helpful input method editor somewhere along the line changing a regular ASCII quote to a smart quote. Argh.





So are my transfer codes still good? Only way to know is to open the box.



Another issue with mail is it slows down the process of having a code to be able to hand off to the gaining registrar, and codes typically don't come with any indication of their validity period. I've gotten a code one day and had it rejected as expired the very next, nevermind the usual multiday delays that can be introduced.



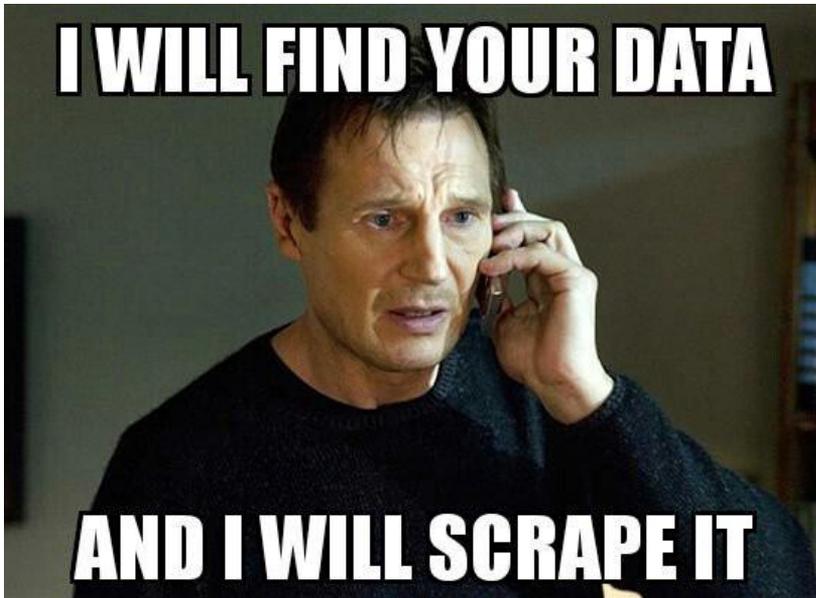
So how am I getting these codes? One thing that several providers enable is multiple management accounts for a master account, sometimes called "Delegate Access". This is an area where I mostly give providers a thumbs up, but for the variable permissions a delegate can have in general and for getting transfer codes in particular. It extends to other areas though, like that provider that I showed promoting its API on the bulk transfer code export dialogue. It doesn't allow delegate access to the API.



Dang, look at the time. Here I am already at slide 33 of a 20 minute talk and haven't even touched yet on registries or operations while there's still plenty more to say about registrars. To segue to operations, let's first do a quick revisit of the comment, "slows down the ownership change (for reasons to be covered later)".



Many of the domains we need to move have both their registration and their operations with the same provider, and it isn't usually all that clear whether the operations is dependent on the registration. Conservatively, we have to assume that there is a dependency and that the zone will become unavailable as soon as the registration is transferred, because the worst case is that we DoS a production zone. We have to get zones that need continuing DNS service to be set up before asking for the transfers.

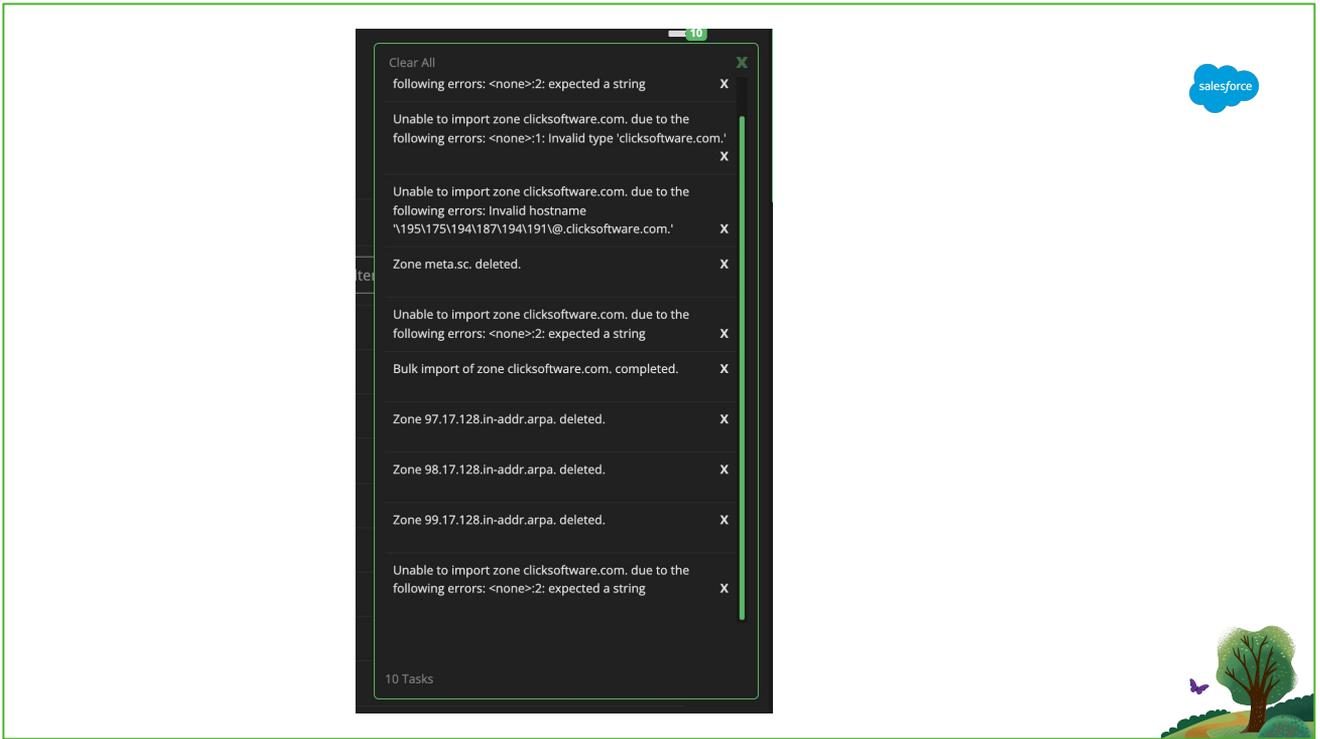


Of course this means getting the zone data from the existing operator, which in the best case is a straightforward master file format export of a domain that uses no special features and in the worst case means screen scraping some portal page of possibly dozens or even hundreds of records.

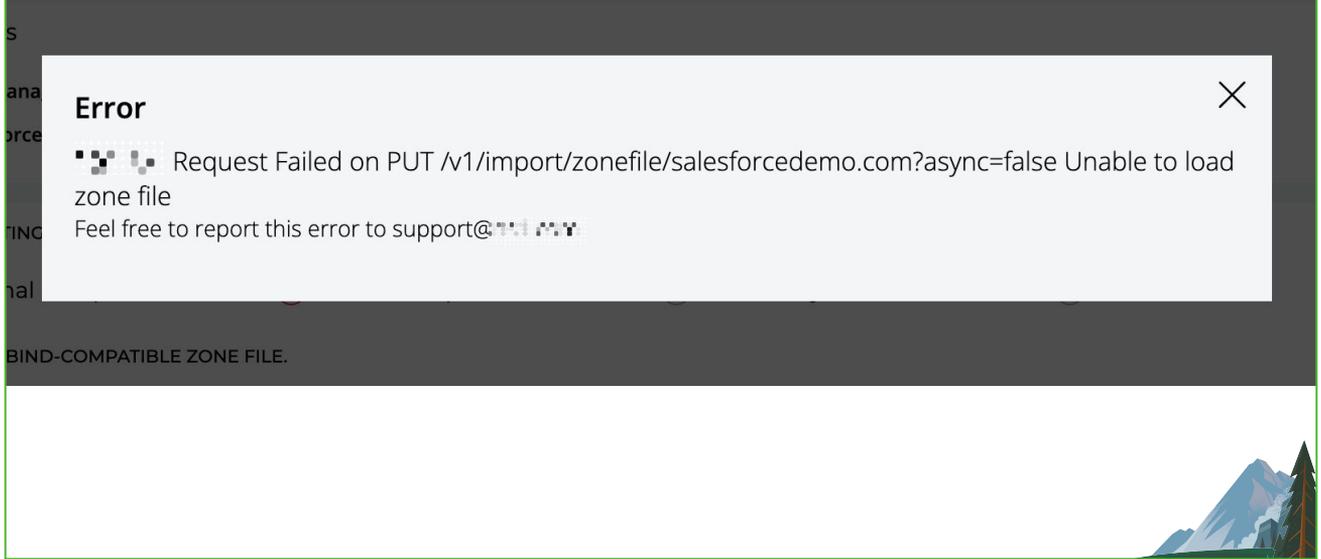


New proprietary extension record types: COBRA and SCORP. They exist only to make your day worse.

The vast middle ground between best and worst cases involves a number of pitfalls. One is that some operators export something that purports to be masterfile format but has some notable problems, for example by writing lines that have TXT record rdata subfields that exceed 255 octets, or by starting the file with a byte order mark that importers pretty much always choke on. Some providers include records that are really only relevant for hosting at their service. Then there is the matter of non-standardized extensions, such as CNAME-at-apex functionality, URL forwarding, or special address rset handling like load balancing. I personally prefer when at least indications of these features are written into the file in some way – I’ve seen comments, special TXT records, or non-standard mnemonics – because otherwise it can be easy to overlook that the special configuration exists at the provider.

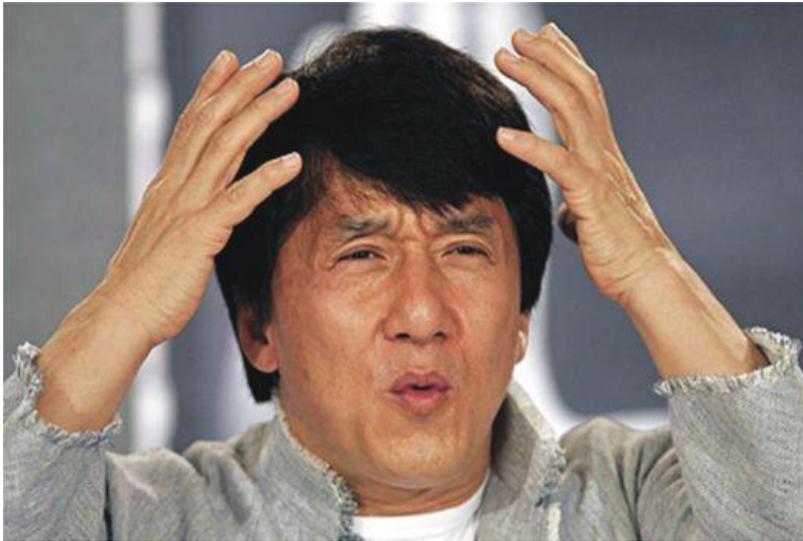


Ingestion then often has its own quirks. For example, one provider delivers its notification of successful or failed import asynchronously via a notification dropdown that is not in any obvious sorted order (certainly not by time) and which can be polluted by dozens or even hundreds of uncleared prior notifications about totally unrelated things. I'll be honest in that right now I don't even remember where the derpiness came from for the errors in this screenshot, but that it took me several tries to figure out was a UX failure.



A different provider at least tries the import synchronously, but can deliver completely obtuse error messages about why an import failed. A recent example error is shown, with the undescribed underlying reason being because the import file didn't have apex NS records even though it would be discarding the underlying NS records anyway — and, thanks to an apparent bug, also not honoring the NS record configuration I'd asked for as part of zone configuration. Oh, and I did report the error as requested and encountered yet another flummoxing feature of modern computing: my report was sent to spam because the attachment of the master file did not have a ".txt" extension on the filename. You know, cuz, like, ... sigh.





There's more to say about operations too, but as time runs short I wanted to cover a couple of quick things about registries. A lot of the registry stuff is hidden behind the registrars, but some of the requirements are unavoidably exposed and not always in a way that clearly gets communicated back and can even leave the registrar scratching their heads as to what the underlying problem is. For example, it took pulling in two world-class DNS peers at the registry and registrar where I was having trouble getting a nameserver update through to eventually determine that the error return was because the SOA TTL being returned from the new nameserver was less than the registry requirement, but that wasn't in any error message and was hard to find documentation about. The same registry was also rejecting an address update for inscrutable reasons. Yes, it did require a specific locale, but that locale was being used and the address format fit the relevant national format. I don't recall how we finally got that one worked out, but am sure that the error message was not enlightening. Keeping track of the multitude of registry requirements, both technical and administrative ... well I'm glad our registrar is pretty on top of it. Even so, there are still surprises.



There is one name I'll call out, though I really don't mean to shame them. I get that there policies are what they are as they presumably desire them to be. Yet I feel like I'm living in a dystopian Terry Gilliam bureaucratic nightmare. Yes, that's right, Brazil. No transfer codes; at first it looked easy, just set the registrar to the desired value via the registry account of the acquired company. But wow, the paperwork that has to be pushed by our registrar. Our registrar has a specialist that deals with it. The number of times we've been back and forth on this just astounds me for what should be a simple task. I'm just thankful that the individual named in the acquired company's articles of incorporation is still available to sign—I have no idea just how much more painful it is going to be to sort out a different .br name that we own but which is associated with the name of someone no longer with the company.





Ok, so that's the DNS. Now let's talk RIRs. Nah, just kidding, we didn't even have time to cover all the issues in the DNS! I will say briefly that many of the same issues apply. Right now I'm liaising between our legal team and one of the RIRs on the matter of a dissolved entity from an acquisition who still had some assigned number resources under that name. It has not gone smoothly.



... well, except you. You people probably would believe.



In summary, this is just a taste of the vast smorgasbord of the many different companies providing DNS services. As a whole the heterogeneity of many different providers is good for the health of the ecosystem, but man do I sometimes wish that all of them just did things the way I wanted them to.



salesforce

# Thanks!

Bye!

Will gladly provide further input to orgs who want to cause me less pain.



salesforce