



Logging in Michigan

Not what you think, it's for Radio!

LoTW is the coolest thing... No, but it comes close!

The big breakthrough was the ADIF standard, so I think it's the:

Amateur Data Interchange Format

Invented for ham applications to move data back and forth over the Internet

LoTW uses the public-private key methodology developed in the 70-80s, picky!

You have to prove who you are to write, and to a lesser extent, to edit or make comments- read things. Big these days for reviewing & signing documents.

These are done with keys (public private), some call hash-tags these days.

The files are appended *.adif or *.adi for short. Developed by _____ in 1996.

Where most all started:

The old ARRL log (paper- still available as sheets). This is great for a long term backup practice.

Printouts from various programs such as Logger32 can be made to look like this.

There are only a finite (short) number of fields, and 1 became really inventive.

But the world got complicated, there have been satellites for quite some time.

PoTA was invented a few years ago, after the IoTW (salty) craze from the UK...

Ironically, the ARRL uses satellite fields for their small subset of accepted data.

LoTW is free to foreign hams to encourage QSLing to the US. (I get about a 25% rate on average.)

The standard for data interchange

Two sources, one in GB UK, and a version called 'Independent'

The ARRL cites the UK (web) site, and for whatever reason I have used the other one. Honestly, not sure why?

www.adif.org/adif, gives you their most recent version. Some specific fields are used for established programs. However, everyone is different!

It's hard to keep up with a standard, not everybody does. Currently it's around 3.1.4.

The data is broken up into groups (like the ARRL) config data/ or *my_data*, your QSO information, geo-location data (both yours and theirs), and space weather.

Files consists of a header and individual QSO records, but can come in any format. Many times you see fields such as APP_DATA_* unique to the service that created the file.

A variant exists as XML, which is capable of showing data in layers. (Show the L4OM config example)

A way of representing logging data

Keep in mind FCC logging is no longer required to this detail, but there are advantages:

- Automatic QSLing, collecting propagation QSO examples
- Management of manual QSLs when that is done
- Keeping a record of your contacts, in case you don't remember who you talked to?
- analyzing how well setups or antennas work, or comparing results
- There is no universal single alternative, but they come close...-
- WJST-X works really well with FT-8, to just take care of everything...
- this is NOT about, your favorite logging programs, but try L4OM, N3FJP, N1MM, etc.
- L4OM/ general, N3FJP/ best value, N1MM/ contesting

Games people play (and organizations)

Everyone wants to create a peer group and recognize achievement:

Trade groups, college societies, political parties, online selling, churches, fraternal organizations, etc.

They all collect your information and offer feedback of some kind. Carrot & stick

Ham Radio is no different: everyone wants to pass out awards for a donation or subscription. However, the awards are unique to that organization.

The goal is to collect your (the most) data... The stick is making you log in.

The carrot is looking up others data, or your stored items.

Getting specific- just for radio

The oldest: HamCall, parent company BuckMaster, still sells a callsign database (and other items) & keeps records of the oldest callbooks (that were paper). This information is published on a CD, or now on a Zip drive.

The US players, other than above, are CQ (Never Say Die), the ARRL, and QRZ. The first 2 offer magazines, CQ for contesting and the ARRL is more general.

A couple of foreign ones: QRZCQ, HamQTH. I think... former Eastern block & the Netherlands. HamQTH gives you the most info without having to log in.

They all have fixed membership costs to encourage their goals.

Some let you set up a free: QSL (website) and QTH (swap & shop).

How do we save the most information?

But there are other goals too, related to awards: the biggest is DXCC.

So, on to the ARRL... WAS is a great award in the US. LoTW has now almost **2 billion** records, is free to foreign operators, and somewhat the same for the US, but membership (the States) in the ARRL is encouraged.

The county hunter are a special case of QSO awards. Seems like in Michigan there are 83 separate counties! You can get these from CQ magazine.

There are big-time, servers and data centers to manage, probably costly and labor intensive. They honestly deserve our support, if you operate!

Ironically, ARRL is not the best place to save your logging data... but I digress...

What does the ARRL save?

Three (3) small groups:

Some input data uploaded to LoTW, and (explain why small?)

your location data (what's called a callsign certificate), and

your QSO partners response, back to the ARRL. Their LoTW upload.

The ARRL trusts your partner more to tell them about their end of the conversation, so they ignore what YOU think you heard, but...

trusts you to tell them what you said, and waits for a confirmation. This avoids the RST dilemma.

Remember, the goal is to pass out Awards and manage a QSL process, a big job.

Conclude, not a good place to save your data. You do get back partner's data if confirmed.

We go to QRZ (website, log destination, & data service)

They allow a free website, and hope to collect your data! And, offer simple awards to decorate your website, similar to the more elaborate ARRL. They started, collecting magnetic tape from the FCC...

They have an XML data service to sell your info to other hams. (XML is a topic all on it's own, but very easy to understand...) Or sell other hams stuff back to you. Nice QSO editor!

The foreign information is the hardest to keep up to date. One service: hamDB only has 5-6 countries at the moment. Australia is one of them.

New licenses, SKs, Vanity calls make this a big job. Now, add all the variants of portable, mobile, and guest call combinations. Special event calls are a topic on their own!

Once you upload, you can delete QSOs with say, the wrong time zone and try again. Most cool features are saved for their subscribers!

They have a 'no loss of ADIF fields' advantage. Not sure what they do with Userdef fields? Their QSL standard is high- it's called a double blind system. Neither ham can see the other's data!

Paper QSLs and the future (eQSL)

One service wants to reduce the cost of this time-honored practice. Old-timers still do this manually, but it may cost \$3 bucks to mail a card internationally and more to get 1 back.

Poor clubs use this (need) to finance their operations (collect US dollars). An example is Western Sahara. Some hams collect (green stamps) bank notes...

Thus, the need for QSL bureaus, which still exist, except for most of the Islands of the world. Joining the ARRL, is a great benefit for sending cards, but you can get them for free (well sorta) through the 8th region incoming QSL bureau, staffed by volunteers.

Down in Texas, the eQSL server was created in 1998. You get to overlay your QSO information on a custom card (usually a photograph), of your choice. This is then sent back to your partner, when their card comes into the service. This can be very reasonable, and fast. There are now over a billion records!

It all happens seamlessly, and you get lots of wallpaper for your computer. You can also manually reply. They use the inbox/ outbox (your log) concept.

The UK oddball, Clublog- the DXers choice

Clublog was setup to keep records of DX QSOs. Sometimes in real-time.

They are big in analysis, and breaking up your QSOs into groups (clubs). Some of the clubs that I am in are: SKCC, FISTS, NAQCC, Flying Pigs...

Clublog allows analysis into some of those peer groups. Or more direct, tallying competition among the members. Great QSL management tools!

<https://clublog.org/livestream/kt8g>, for example, shows all my recent contacts. This is great for live contest updates. You can sync LoTW to Clublog, and back!

There may be economic reasons to save QSO data, for adaptable HF radio links in the future, where the Ionospheric conditions are also stored along-side.

The best value for your effort:

Register on the PoTA website. You don't have to upload anything! The activators upload their results to PoTA. (Remember, the award angle.)

The hunters can get a pdf award without uploads. Those generous activators.

I easily got (worked) a 50 contact award, with no uploads. (Over 3.5 years)

(Ever wonder why only a few PoTA stations transmit the park they are in?)

Hopefully, the hunters also upload to the LoTW, later on. Uniquely American!

See more at <https://parksontheair.com>

Hope for the future- trusted partner

This is not the guy/ gal you talked to, but someone who passes awards out like the ARRL. Currently, the only one the ARRL trusts is Clublog!

I think QRZ could be a close second, because they can implement a 2 factor identification scheme, that many US banks are using.

Certainly a common criticism of LoTW is the startup process, but it is the most robust method. It tries to avoid folks making up QSOs for the purpose of getting fake awards. LoTW requires renewal every 3 years!

All the schemes have ways of getting LoTW data, or QSLs, but few allow direct uploads to LoTW. The latter, is what trusted partner means. If different hams upload to each service it makes sense to synchronize the logs.

What is TQSL?

Next, Trusted QSL is (a trade-mark) by the ARRL? And a program...

Establishes who you are with a postcard initially (to your FCC address).

Send it back to the ARRL! They return a certificate, by email, which you fill out (where you currently are). eQSL calls this 'authenticity guaranteed'.

You can have many locations, with your password (tag). Think Pota.

Each set of QSOs is sent in with the location and your unique hash-tag.

This completes the upload process, but mistake QSOs just stay there.

Under the hood- the HTTP get command

Example from the ARRL

https://lotw.arrl.org/lotwuser/lotwreport.adi?login=kt8g&password=pswd&qso_query=1

Example from hamDB

<http://api.hamdb.org/k1pug/CSV/goglshts>

Example from QRZ

See their documentation.

What is a hash-tag? A random sequence of numbers & letters.

Contest logs- the other format

Cabrillo- is also accepted by LoTW in lieu of an ADIF. (ADIF includes XML!)

It was designed to be a more humanly readable format than ADIF.

One common difficulty is called enumeration. There are only a certain number of acceptable values for a field regardless of the common usage. For example, there are only 50 states, and the names must be consistent. Think WAS!

One place this gets really confusing is for modes and sub-modes. Most don't even know about the latter, and the programs (or bots) expect you to do it right.

Cabrillo shares this difficulty with ADIF.

The end- good (radio) hunting

A fine point, maybe submit 2 entries for special event stations, the call worked and the operator behind the call. Other helpful references:

A good one is the LoTW-Clublog integration instructions...

Another great read (takes awhile) is the QRZ logging manual. This gives some insight into their double-blind system.

Also, read the eQSL comments on why the ARRL won't accept their confirmations! eQSL has a good slide show on their website!

Lastly, read up on the Trusted Partner (an IT) standard from the ARRL

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What do I do?

My Windows 10 computer crashed, so I now log to Google drive. This has been done by other hams and has some cool advantages.

It will be demonstrated at W8DC in the near future (on a Sunday). How many have Google chrome machines?

It uses the survey method Google invented for small businesses.

For example, it might allow for a club to log all it's members QSOs at once to a large server such as the ARRL (with permission of course). Like on Field day.

So my spreadsheet (yes) creates an ADIF file which I upload to LoTW via TQSL. After that I also upload to QRZ, eQSL... and await for the QSLs to come in.

Google Forms (sheets 2) logging @Kt8g

How it (briefly) works:

Google has a facility to do remote surveys for small businesses.

You create a form with the questions you want answered. (Think the details of a QSO instead of survey questions.)

The form can be automatically linked to a spreadsheet, or a ss tab, with the same headings as the questions in the form. The submit time is logged automatically.

For (my) logging, I copy the form into the spreadsheet, and in another tab, have more appropriate headers 4humans. All data thus exists in the cloud.

The cool thing is ss's handle time-date stamps & that arithmetic type really well!