TIC Conference Call
Tuesday, January 21, 2014
11 a.m. PT

Attendees
CS Chris Stephens  PC Phillip Crotwell
DW Dave Wilson     RB Relu Berlacu
DN Doug Neuhauser   RH Renate Hartog
DO Dave Oppenheimer SK Sue Kientz
EY Ellen Yu         SZ Stephane Zuzlewski
FC Faria Chowdhury  VT Valerie Thomas
PA Prabha Acharya

Meeting Discussion
Meeting topics are summarized below, with some issues and suggestions explained in more detail.

Developer Updates

• FC reports the test server is up, and a skeleton site is available.

• Support is available by emailing sis-help@gps.caltech.edu. The messages sent to this address go to a list of people, so we can provide fuller coverage in case someone is absent.

• Questions and answers generated via sis-help@gps will be turned into a FAQ.

• If you have a request for reports, you’ll probably have a better idea once you have your own data to look at. You should try the upload feature (you will need an account for that; request one at sis-help@gps by sending your preferred username and RSN name to which you belong).

• PA reports that we’ve received model name from Stephane, and they’ve been loaded into SIS.

Which browsers should the SIS interface support?

• VT suggests Chrome and Firefox. IE has issues.

• Older IE versions (e.g., IE 6) and javascript have trouble

• We’ll put problems encounters on a wiki page called “Known Issues”

• PC suggests we not worry about really old browser versions.

• DN asks about mobile browsers; FC says there is no mobile site. You can view via a smart phone but the display will just be very small.

• EY asks if there’s a problem limiting SIS testing to just Chrome and Firefox. DO mentions everyone in USGS is required to use Chrome to read e-mail.
• **Consensus** is that Chrome and Firefox at present will be the browsers that will be confirmed to work in SIS. Nothing intentional will be done to prevent people from using IE or Safari to access SIS.

**How will model names be added to the database? Will a committee be needed?**

- PA says that’s for the TIC to decide. Right now, you must email the SIS team any new model name for including in the database.
  - Not using a committee will mean adding model names will be faster
  - Having a committee will control the creation of numerous similar names for the same model
  - Will people check the list before making a new model name? Can we trust that to be so?
  - VT suggests we make a few ground rules (like checking the list before making a new model name)
- Once SIS is in production, you’ll add new model names via the web interface. The developers envision that maybe one or two users from each RSN will be given the necessary permissions to create model names.

**When users add a new model name, will we need to generate a new StationXML?**

- Yes, because right now model names are embedded into it. But once an RSN’s data is imported into SIS, they won’t need to generate a StationXML to import data again (or that’s the plan).
- Developers could just take the model names out of the schema. It might be more of a headache to maintain it than just take it out.
- RH points out that we’re required to use those particular names, so it’s helpful to have them in the schema now. PA says that a list is on the new SIS website, at Home> Equipment> Categories (or directly via [http://anss-sis.scsn.org/sistest/equipment/category/](http://anss-sis.scsn.org/sistest/equipment/category/)).
- SZ says each time there’s a new version of the schema he has to regenerate all of the java classes.
- FC will send out the model name page URL, and the developers will remove the model name from the schema.

**How will we coordinate with the NRL?**

- MT not on call, so that answer is pending.
- If a model name is added to the NRL, the cron job that checks the NRL will add the name to SIS. We need to check with MT how often to run that cron job.
- DN: What keeps the NRL from using names different from what we use in SIS? E.g., what if a regional network uses ABC for a particular piece of equipment, but later on the NRL wants to call that equipment something else. VT suggests we discuss this with MT on the phone; we want to coordinate with the NRL on model names.
- VT thinks that most of what RSNs will be adding will be non-off-the-shelf items, things that are specific to an internal network. Pieces of equipment that have been developed locally, for a specific purpose. But the things that RSNs buy from vendors, that are well known, that will be coming through the NRL rather quickly, if it’s not
already in SIS. We just need a well defined set of rules for naming the little things, e.g., thermometers, barometers, etc., like developing a standardized vocabulary. Perhaps we should draft some basic naming convention guidelines for new instrumentation, and talk to MT on the next call.

- PC: You could have a global list of very common things, and then for items more specific for an individual network, have them prefix them with a namespace kind of thing, to avoid conflict.

**Multiple Tracking Numbers for Equipment**

VT: Some networks have equipment identified officially with two numbering systems: a property tag number (usually printed on a sticker on the equipment piece), and an asset number, an internal tracking number that helps the internal tracking people track internal things. Currently in SIS we are only tracking the property tracking number, but should we add a field for the Asset Number? Caltech has an internal tracking system, but they aren’t requiring us to use that system. But the USGS does use an internal tracking system. So for the USGS, it might be very helpful if SIS was able to store that internal tracking number, or asset number, as well as the property tracking number.

**Discussion**

- DN: Where does the asset number come from, and how does anyone entering or querying information use or get that asset number? VT: Asset numbers are generated by internal property administrators and appear annually on a spreadsheet, when distributed to people like myself who are required to keep track of them. They can be useful when serial numbers or property numbers are incorrectly entered, as asset number can be helpful to correct those mistakes.

- Folks at ANSS depot have access to the asset number; people at U of W have one person asked to track the asset number; in So. Calif., it wouldn’t be hard to get that information into SIS. DN says Berkeley only has a property number, and has never seen an asset number. If he got any USGS equipment, how would he get that asset number? VT wonders how he would have gotten USGS equipment not already entered into SIS; she also would expect ANSS Depot would be willing to do that level of data entry into SIS so that when equipment is sent to the RSNs, it would already been able to install (and so have the asset number included).

- DO explains that Lynn G said she doesn’t want to track equipment that Berkeley has because she has too many pieces of equipment, so that you, Dave O, are responsible for holding that equipment. There’s historical stuff that DN is dealing with. DN: So when I return things to and from the Depot, how does this reflect DO’s inventory? VT: That’s DO’s headache. DN: If Dave and Lynn aren’t able to get this straightened out, then nobody’s going to be able to get this straightened out. VT: Speaking for So. Calif., when property leaves the depot and comes to So. Calif, it leaves Lynn G’s property list and enters my property list. When it goes back, it leaves my prop. list and enters Lynn G’s property’s list. DN: But nothing even goes through DO’s property list to get to me. DW: For retail networks where there’s no local USGS person like Dave, the property stays on Lynn’s list or my list, and then we contact the regional networks once a year. Caltech and No. Calif are special cases with their own USGS persons to help us do some of that property tracking.

- PC: In the schema for the loader, we have the notion of owner, which is already associated with the property tag. Then we also have co-owner, and co-property tag. Could we reuse that for this asset thing? VT: I’d rather not reuse that tag for this, as we have that setup to handle the fact that on some pieces of equipment both USGS and Caltech want to affix their own property tags. So there are two entities with two property tags on one
item. When the inventory is done by property tag, it is important to be able to track that. So each owner has specifically a property tag field.

- RH: What about hyphenating them? DN: That’ll be a mess because you won’t be able to search on one or the other. VT: Yes we need to be able to sort on them. PC: Having only 2 tag fields is kind of a dumb number. If you’re going to allow two, you might as well allow unlimited. You might want to rehash property tag, so there’s some notion of property tag, instead of just being a simple string, it is the string that is the property tag, and another string that is the entity that designs the property tag, and a third string that is its role. The entity string is USGS, and the role is “asset tag.” FC: We have one additional complication in that those fields are part of an epoch. That’s why we limited it to two. So now we’re going to have epochs in one time in one direction, and an infinite no. of property tags in the other direction… could we say that property tags are not epoched? They just exist? So that if you change it, you’re overwriting the old value? PC: If you switch to a system where each property tag has several strings, you wouldn’t have to overwrite them; you could just add new ones. FC: Are all those part of an epoch? Or are they going to just hang off the equipment itself? That was the challenge we had. DN: Can property change owners? PA: If it’s not epoched, we’d never know what is the latest property tag. There would be a whole bunch of property tags, and we wouldn’t know what the latest one was. EY: Can’t you tie it to the current owner? FC: That’s kind of the point – we’re moving it out of the epoch. Is there a lot of buying and selling going on here? DN: No but there’s giving away. FC: But that’s operatorship, and that’s definitely epoched. DN: That’s ownership – we’ve given away equipment to other places. VT: Operatorship is when someone gets something from the ANSS depot, and they get to operate it for a time, but it’s always owned by the ANSS Depot/USGS.

- VT uses an example of equipment that was sent to Mexico, where some items were actually transferred to ownership to Mexico and other pieces were retained as owned by USGS. Discussion continued on points such as, wouldn’t the new owners retain the old property tags for historical purposes. DN insists they would not. FC: We just have to know, is this epoched or not? Because that’s just going to make this harder. EY: Does the asset number change if it changes owner? Once it leaves the USGS, is that number no longer relevant? VT: Once a piece of equipment is transferred out of USGS ownership, that asset no. no longer applies. The asset no. would come to an end.

- PC: If this idea is useful for a small number of people, but not globally, we have the notion of equipment logs, where you can put an unbounded no. of comments on a piece of equipment. You could put in a piece of equipment that says, Subject, USGS asset number – value, whatever the asset number is. I don’t know how the search features could allow you to do that, but you could attach it to equipment without creating a special database deal for it. PA: If it needs to be searched on, that would be hard, if the purpose is so that someone can look it up using an asset ID. If it’s in the logs, it would be hard to search. PC: You could offer the ability to search logs, and so people could search for lots of things that way. PA: You’d have to remember whether it was “assetid” or “asset_id” or “asset-id.”

- VT: This is a small item that’s used at least annually. DN: If you have both the asset ID and the serial number, why not just use the serial number? VT: Because sometimes the serial number is incorrect. The SN requires hand entry, where the asset number automatically increments for them. RH: Not all properties in the list maintained by our person for USGS has an asset number for each piece of property. And some USGS property is missing a property tag. VT: One of the problems that we run into here is, often the USGS property tags show up months
after the equipment has been deployed, so there’s definitely this issue. Could I offer a middle ground between
two fields and unlimited fields, and say we just pick an arbitrary number? Like 4, so there’s some room for
growth, or 3, so we can still handle epochs. PA: Can the asset ID change over time? VT: I’ve never seen the asset
ID change in the 3 years I’ve worked for them. DO: I don’t think they change. They are tied to the property
number. PA: Then it does not need to be epoched. It could be in the same table as the serial number is. RH:
Unless it changes owners.

- VT: I know this is trying to solve a USGS problem, but I know that everyone on the phone has some USGS
property somewhere. RH: You could make it searchable on a part of the string. FC: SIS allows a case-insensitive
search. VT: When people get their yearly property list, it’s ordered by asset number, not by property tag. If the
information in SIS could be ordered by asset number, it would make reconciling the property that they are told
they have, with the property they have put into SIS, much more easier to do. So having it as an independent
field would help group the information in a way that it’s grouped in this report form.

- DN: So will this specifically be a USGS asset ID or are you going to need an attribute to make it anyone’s asset
ID? VT: It doesn’t need to be USGS specific, but it’s trying to solve a specific USGS problem. If we at least have
the ability to add an asset ID tag to equipment... DN: And an asset ID domain? FC: Or the org? VT: I was assuming
that the same way the property tag is associated with the owner, that the asset ID would be associated with the
owner as well. EY: So an owner should be able to assign a property tag and an asset tag? VT: Yes I assumed the
owner would assign one or the other or both. I can’t imagine a non-owner assigning an asset ID number.

- VT: Are there objections to adding an asset ID field under all of the property information? EY: I think the only
thing that throws into question is the fact that now you can have a co-owner, and do they get to have an asset
ID? The field is 30 alphanumeric characters, but we would not enforce it to be unique. PA: If a new epoch needs
to be created, should these IDs be carried forward? Or will someone type them in again? VT: However we treat
property tag, is how we should treat asset number. Should be alphanumeric, and I would think the asset ID
would populate forward, and be something they could manipulate and change if they needed to. I don’t think
people should have to hand-reenter in the number, that just gives more opportunity for mistakes. RH: People
won’t do it, if they have to hand-type in everything each time. It won’t get used. PC: That wouldn’t change like
channels – just when the owner changes would that field change. PA: Also when inventory status changes, like
when it goes for repair. FC: The property no. could only potentially change. It will usually just get copied over, if
all you’re doing is changing the status from repair to fixed. The alternate is to have a separate table for each of
these, where the epoch date is put in each of these tables.

- PA explains that the idea was that they wanted to track when there’s a change in the inventory, the operator, or
the owner, with the date, although these are all independent fields. In each case we wanted to track the date
when the change occurred, and keep track of the history. So we just put them in one table. We were going to
carry forward all the remaining values. EY: Does it sound like we should store the asset ID associated with its
equipment and its owner, and do we want to have it available in the next version of SIS? We might need further
discussion for all the business rules, to make sure we know the right way to change the schema? VT: I’d vote to
add this option. It’s not like you will be required to use it. Right now we don’t require the property tag to be
filled in. I’d recommend that we don’t require the asset no. to be required. PC: This is feature creep but if it’s
useful then it’s fine. VT: I believe the asset no. is assigned first and then a property tag is entered later. DO
mentions that the property people enter equipment into the system, and when the property is delivered, he
gets a form that assigns the asset ID and property no., and he’s required then to send in the serial no. RH: In theory, either the property tag or the asset tag should be sufficient to find a piece of equipment. For reporting, no one in this user group would need to keep track of asset no. It’s really a USGS internal issue. RB: We also have asset numbers, one for the university inventory. RH: So maybe it will be useful. EY: So we should put this in the next release? VT: I’d prefer to have it sooner rather than later, but I don’t know how much work it would take. RH: It would be better for someone to load it in, rather than type it in. VT: And there’s no field in it in StationXML? PA: But adding it to the StationXML is only being used for the initial load. We thought that later you would all use the UI to enter new equipment. EY: So if it’s not in the initial load, you’ll have to hand-enter it. Adding a new field into the new schema would take time, and whoever is writing the StationXML would have to script it…. VT: So it’s too much to do now? DO and RH agree it might be too much. VT: OK yes we don’t want to slow down what we’re doing now. Let’s table it as an option for the future.

**Decision:** We will table adding “asset ID” until a later version, but developers will put it into a ticket for consideration at a future time.

**Dataloading**

PA and PC have been working on loading some files this morning. RH plans to try to upload something. SZ is advised to just upload in future rather than sending the files to PA. The developers also see the notification email. SZ asks what kind of details he’ll get back, if it will provide error messages. PA: You’ll find maybe a cryptic error message but the email will tell you whether you are successful or not. Developers are still working on the details that end up in the error messages.

DO wants to know whether he should work to get asset numbers to SZ now, in the Fred Sheet, so that they can be uploaded in the initial loading. DN and SZ say there is no room to put the property in the Fred Sheet. DN suggests they decide this on their Friday call.

**Optional Off-Date Field**

PA brings up the idea that they are considering making the off-date field optional. This would mean that we don’t expect people to provide an off-date, like a fake off-date like 3000-01-01. We would like to make it a rule that there will be no off-dates in the future, and when the loader encounters one, it will flag it as an error. That way, we don’t get inconsistent future off-dates. This can mess up our queries. If it’s an active epoch, the off-date will be null. To DN’s question of what SIS really uses, PA says internally it is 3000, but it will not display that in the UI and it will not write it out in the Station XML. But we cannot store an empty value so it will have 3000 internally.

DN wonders how one might search for a value that is not displaying. PC reminded him that the stations or whatever the epoched items are, are active, so one would just query for active stations. DN believes that this is a decision that should just be made during import. PA notes that they just prefer the off-date be left blank. If there is an off-date specified, they don’t know if it’s intentional (like perhaps the off-date is set to be 2 days out, not 200 years out). Since the off-date is then optional, there’s no need to specify anything. SZ asks what happens if he uses 3000. EY says they’re just returning an error on any future dates. PA clarifies that the off-date is not required for the StationXML. Discussion continued about this being merely a proposal to warn users that all future dates specified in the StationXML will cause an error. SZ wonders if instead of an error, SIS should just give a warning. PC is of the opinion that he’d rather the load fail than get a warning, as then the data is in there already, and to fix it would cause more work.
PC reminds the group that the developers are asking that we set on a rule – pick a date, that if any date is later than that, the off-date will be considered null and the station active. The group needs to pick this magic date that is the cutoff and all later dates are just indicating “future.”

**Decision:** If we receive an epoch that ends in the future, and the future is anytime past the time stamp of the loader at the moment that metadata is being loaded, then that is considered an active and open-ended epoch. The loader will load that information and assign it the same “end-date” that SIS uses to indicate something as “active,” which is the date 3000. PC suggests that when using the GUI, if a user enters a future date, that the GUI should warn the user about the date being in future. VT adds that future end-dates are allowed, when entered via the UI.

**Proposed for Next Call: Portable Instrumentation and Portable Deployments**

DO says there’s an active discussion on this topic in USGS and he feels these items should be in SIS. He’s unsure if SIS has the ability to track the arrays.

- This situation occurs when an earthquake happens and instrumentation is sent to the epicenter to assist in sensing additional seismic activity.
- Temporarily the operator would be assigned to whatever netcode is handling the current deployment, and when that deployment disbands, and that equipment goes back into inventory, it would return to the original operatorship (that would be 3 epochs).
- DN: Who can change operator? Only the current operator, or the owner? FC then discusses the problems of instituting permissions, and gives an example of a piece of equipment: its epoch can’t be changed unless you are the correct operator, but the serial number of that piece is not tied to operatorship, and could be changed, perhaps by some temporary operator in whose hands the equipment has been temporarily deployed. EY addresses DO’s original concern and assures that we can change the operators and then change them back after deployment. Business rules about this process need to be determined.
- Do we want a checkbox for certain pieces of equipment that may be designated for this kind of deployment, so they can be easily separated from other inventory?

**The next meeting is February 25, 2014, at 11 a.m., same phone information as always.**

*If you have something you’d like to discuss at next meeting, send Valerie Thomas a note by February 20.*

**Accessing the Meeting Recording**

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